Clinical Lecture
ON
STRICTURE OF THE URETHRA.

BY S. MESSENGER BRADLEY, F.R.C.S.,
SURGEON TO THE MANCHESTER ROYAL INFIRMARY, AND LECTURER ON PRACTICAL SURGERY, OWENS COLLEGE.

GENTLEMEN,—It is proverbial that embarrassment, carelessness, and ignorance may be associated with great opportunities—nay, may even be said to result from them; and thus it is possible that some doubt may exist in your minds as to the best mode of dealing with strictures of the urethra, in spite of the variety of methods adopted and the vast number of cases you see treated in the out-patient rooms and wards of this hospital. Now, having lately had two cases under my care which strongly bring out many of the most important points in the treatment of this malady, I have ventured to make them the basis of this morning's clinical lecture, which will be devoted to the consideration of the Surgical Treatment of Organic Stricture and Rupture of the Urethra. The cases are, indeed, illustrative of these two great divisions of urethral complaints; the one resulting from an old gonorrhœa, the second from a fall on to the perineum.

This is briefly the history of the first case. Mr. D——, aged forty-five, had for years suffered from difficult micturition, with occasional attacks of retention, which, until the one that led to my visit, had always yielded to warm baths and a glass of gin-and-water. The stricture was of long standing, and resulted from a gonorrhœa contracted twenty years before. He had never had an instrument passed into the bladder. On August 1st, 1878, I saw him in consultation with Mr. Smart, who had previously attended him, and who informed me that in spite of patient and persevering attempts to pass a catheter he had failed in introducing anything into the bladder. The retention was complete, of many hours' standing, and the distension extreme. After trying without success to catheterise the patient, I tapped the bladder per rectum and tied in the cannula. This of course gave immediate relief, and also afforded us breathing time for our future plans. With Mr. Smart's permission, the patient was now removed to hospital, and until he left (quite well) he lay in Albert ward. An elastic tube was attached to the cannula, and the urine was thus allowed to escape into a vessel without lying to decompose in the punctured bladder. The confinement to bed, with the use of diaphoretics, having reduced all congestion of the urethra, attempts were now once more made to enter the bladder *per vias naturales*, but for some time in vain. In the mean time his health did not suffer, and he experienced very little inconvenience from the presence of the cannula. After he had been in the infirmary for seven days some urine began to escape by the urethra, and the cannula was removed from the rectum. (It had been taken out once or twice previously to clean it, but had been re-introduced on each occasion; now it was finally removed.) A singular phenomenon now presented itself: it was found that our patient had unconsciously acquired a perfect sphincter control over the recto-vesical opening. Not a drop of urine dribbled through this aperture; even after a night's sleep the bed remained perfectly dry, but when he wished to micturate then he *sat* upon the vessel and passed water *more feminæ*. I suppose this power to have been due to the puncture passing between some circular figure-of-8 fibres in the trigone of the bladder, presided over by the same nervous guardian as the neck of the bladder. In this condition he continued for about a fortnight, getting up every day unless we wished him to remain in bed for examination purposes, and going about as if nothing ailed him. One day I slipped a ferret into the bladder, and there and then we followed this up in the way with which you are now familiar, until it was easy to pass a No. 4 catheter. In other words, a silver catheter of small size was screwed into the threaded head of the ferret, and readily passed, after Gouley's plan, into the bladder. Dilating tubes were then slid along the catheter in the manner which Mr. Lund introduced and popularised in this hospital, and the whole apparatus withdrawn; then a Holt's divulsor was introduced without difficulty, and the stricture was dilated sufficiently to allow a No. 12 English catheter to enter the bladder without hindrance. Little or no disturbance followed this simple operation, which was almost bloodless, and was, as is always my custom, performed without chloroform; and the patient left the hospital three days later, with instructions to present himself every week for catheterism. This he has continued to do, and as yet the stricture shows no signs of recontraction. I should add that from the moment of dilating the stricture the flow through the rectum entirely ceased, and the opening apparently closed; at all events, every drop of urine has, since the latter operation, been voided by the urethra.

Let me now draw your attention to the case of ruptured urethra. During the stay of Mr. D—— in hospital, a boy aged nine was brought in with rupture of the urethra from a fall across a railing. Already on admission there was urinary extravasation into the perineum, and the distended bladder rose high into the abdomen above the pubes. Our resident surgical officer, Mr. Southam, drew off the urine with an aspirator introduced above the pubes, and made free incisions into the perineum. When I saw him the next morning, no urine had passed per urethram, but a little had dribbled through the perineal incisions; the bladder was again distended. Having chloroformed the lad, I proceeded to examine the urethra, and found it apparently completely interrupted in the perineum, of course rendering catheterism impossible. This point being cleared up, I decided upon entering the bladder from the perineum, by the operation introduced, and strongly, though I think not too strongly, advocated by Mr. Cock. Indeed, I am of opinion that in such cases as the one I am bringing before your notice, this is ever the proper plan to pursue. With the left finger introduced into the rectum, I made pressure against the elastic trigonum vesicæ, and then, with a long-bladed finger-knife, cut towards the tip of my finger directly in the middle line, entering the knife at the central tendinous point of the perineum, and carrying it on until the escape of urine informed me I had entered the bladder, or some part of the urinary passage; then, withdrawing the knife, I glided a short silver catheter along the incision into the distended organ, and quickly drew off the urine. I then tied the catheter in, and left him. Next day he was very comfortable, and I resolved to restore, if possible, the natural passage. Accordingly I slid a shallow broad director along the catheter, which I then removed. Next, taking a No. 6 silver catheter, I passed it along the urethra from the meatus till the point emerged in the perineum, when, turning it into the groove of the director, I contrived, after a little manipulation, to slide it along this guide into the bladder. Now the main object was gained; and from that day henceforth my chief anxiety was to prevent, if possible, the formation of a traumatic stricture. With this end in view I kept in the silver catheter, with few intervals, for a fortnight, until the perineal incisions had healed, and afterwards continued to pass an instrument every other day until he left the hospital; then instructions were given to his parents either to bring him to the infirmary every week, or to take him to have the urethra examined by their own medical man from time to time. By this means we hope to save him from the direful consequences of a slowly but surely contracting urethra.

Such, gentlemen, are the cases, and now for the lessons they teach.

In the first place, you will notice that in neither case was it possible to enter the bladder by the natural passage, but that we adopted different plans in the two cases: in the first we made a paracentesis vesicæ through the rectum, tying in the cannula; in the second we opened the bladder from the perineum. The reason for acting thus is obvious. In the first the natural passage still existed, and, though we were unable to pass an instrument, we knew that it still existed as a *pervious tube*, for non-traumatic organic stricture never obliterates the passage, and therefore we felt confident that if we could gain time by some simple plan, such as tapping per rectum, we should some day or other succeed in our attempts at catheterism. As the sequel showed, this was a just confidence, for in a few days we slipped in a filiform bougie; and, having done this, it was, as you know it always is, a perfectly simple plan to there and then dilate the tube to any extent we wished. The second case was different. Here the natural passage no longer existed in its

integrity; it was partially or entirely interrupted, ruptured by the fall; hence no such proceeding as tapping suprapubically or rectally would, by giving us time, enable us to restore the urethra. It was therefore desirable to perform such an operation as would enable us to restore the urinary passage, and such an operation we have in the perineal section of Cock.

It, of course, goes without saying that if you can in any case pass a catheter, you will not adopt either one plan or the other; but when you cannot, then, I believe, you will be right in electing, in all impermeable non-traumatic organic strictures, except where there are numerous urinary fistulæ, to tap per rectum, and trust to time and patience, with rest in bed, to enable you to pass by and by an instrument along the contracted tube; and in all cases where the urethra is ruptured by violence, and you cannot catheterise, to perform Cock's operation, and then to restore the passage in the way above described; and, further, this plan of performing perineal section is probably the best to adopt also in cases of impermeable non-traumatic or traumatic strictures, when the perineum is riddled with urinary fistulæ.

And now a word or two before we part upon the subsequent treatment—that is, the treatment of urethral strictures after you have restored the passage sufficiently to pass a No. 4 English catheter. There are three plans open to you—gradual dilatation, immediate dilatation by divulsion, and internal urethrotomy.

In favour of gradual dilatation we can say much; it is perfectly safe, it is not necessarily tedious, and though, like every other plan, it is followed by relapses and recontractions, it is probably less liable than the others to this serious drawback. If employed, the best method is to keep the patient entirely in bed, and almost constantly to keep a catheter in his bladder, only taking one out to put another and a larger in its place. In this way a tight stricture may generally be dilated up to admit a No. 12 or 14 English size in a fortnight. Beyond this degree of dilatation I do not care to go, in spite of what the Americans say in favour of much greater dilatation. Personally I do not tell my patients they are cured of a stricture, but, on the contrary, urge them to learn to pass an instrument for themselves or to present themselves for examination three or four times a year. Gradual dilatation practised in the manner now mentioned is certainly calculated to promote the absorption of exuded lymph and even organised fibrin, but that urethras so treated may yet relapse is sufficiently attested by the history of a case in Mosley ward, in which we followed out this plan *de rigueur*, and yet where the stricture recontracted, so as not to admit a No. 3, in less than three weeks.

In favour of immediate dilatation a good deal may be advanced. When the kidneys are healthy, it is, I think, quite a safe procedure. It is not a very painful one: e.g., I constantly perform it, and never give chloroform; the patient is not confined to bed for more than a day or two, and it is of course speedy. My own experience goes to show that relapses are rather more frequent than from gradual dilatation, but that with proper instructions as to having an instrument passed at stated intervals, and perhaps with a few lessons in catheterism so as to enable the patient to look after himself, this should not lead to future difficulty. In many cases the stricture is confined to the submucous tissue, and this, being naturally more brittle than the elastic mucous lining, will be ruptured by the divulsor without any lesion taking place in the lining membrane; in other cases, where there has been, from ulceration, loss of mucous membrane, of course *both* will be torn. In the former case no hæmorrhage takes place; in the latter there is a little bleeding, but always very trifling, and soon ceasing if left alone.

Of internal urethrotomy, gentlemen, I have no personal knowledge; but, although I am aware that abler and more experienced surgeons than myself practise and speak highly of it, I cannot but regard the operation with extreme suspicion and disfavour. In boldly criticising it, then, as dangerous and unsatisfactory, I would have you remember that it is the criticism of one who has never performed it, and who, I think I may add, never will. I dislike the operation for the following reasons: it is perilous at the time, for I have known death to follow from hæmorrhage in a few hours; it is pregnant with danger for a considerable time after the immediate risk is over, for I have known death from septicæmia to follow ten days after its performance; and it is not attended with any advantages over immediate, and still less over gradual, dilatation, in being less prone to relapses, for I have known a case twice operated on by internal urethrotomy which yet resisted the passage of any instrument a few months after the second operation. I quite fail, then, to see, gentlemen, what there is to commend this elegant operation. It is true we hear of "organisation of the blood-clot," and of the "cicatricial splice" thus fashioned being more elastic than ordinary scar tissue. Is not this nonsense? Imagine the crowning glory of antiseptic surgery—the organisation of the blood-clot—taking place in an incised urethra; that is to say, in an incision washed every few hours in urine! The greater elasticity of the cicatricial splice, again, however it be formed, is mere matter of assertion; there is nothing to show *why* this should be so, and there are no reliable comparative statistics to prove that it *is*. In those cases of tight, or it may be impermeable stricture, where the perineum is riddled with fistulæ, the remedy is not, as it appears to me, internal but external urethrotomy; and I myself anticipate the day when internal urethrotomy shall be relegated to the limbo of discarded surgical operations, and when we shall be content to treat strictures of the urethra without this modern improvement.

A PLEA FOR THE EMPLOYMENT OF THE DYNAMIC TEST MORE FREQUENTLY IN EXAMINATIONS OF THE HEART.

BY C. HANDFIELD JONES, M.B. CANTAB., F.R.S.,
PHYSICIAN TO ST. MARY'S HOSPITAL.

IT seems hardly to admit of question that the real efficiency of the heart is to be judged much more by its capacity of endurance under fatigue than by the force of its contractions when the body is at rest. A heart during repose may be acting languidly, but immediately after, during exertion, may put forth very much more force, and continue to do so for a considerable time. On the other hand, a heart during repose may be acting quite normally, but under bodily exertion may soon falter and act defectively. If proof be desired of these statements beyond that furnished by our common experience, I refer to Figs. 1 and 2, 3 and 4. The first two show that the tracing taken after a quick run of

FIG. 1.

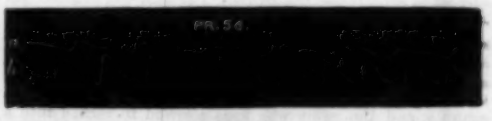
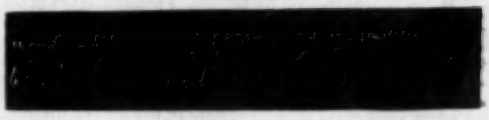


FIG. 2.



a mile or so may be notably ampler than that taken at rest, while the cardiac force, as measured by the sphygmometer, is also increased. The increase in Fig. 1 is twelve grammes, in Fig. 2 ninety-nine grammes. The spring pressure employed was the same before and after the run. If it is objected that mere relaxation of the artery would induce a greater height of rise, the heart's force remaining the same, the reply is that, in the great majority of cases, exercise of the same amount *lowers* the rise notably, and that mere maintenance of the force of the heart contrasts strongly with the *loss* which it often experiences under the same circumstances. Lowering of the rise is a marked feature in Figs. 3 and 4. The former was taken from a man about thirty, in apparently good health, with normal heart-sounds. He was much exhausted by the exertion, and vomited soon after he came in. The tracing then afforded by his radial (*b*) is strongly indicative of feeble heart-action, the rise being very low and sloped. To obtain this the spring pressure was reduced from 140, with which the first tracing (a fairly well developed one) was taken, to 84, and a somewhat better one (*c*) was obtained afterwards with 26 grammes. The radial pulse was arrested by 138 grammes after the run,

but required 250 before. The latter set of tracings (Fig. 4) were taken from N. M——, aged twenty-seven, a vigorous,

FIG. 3.

FIG. 4 (*a*).

Tracing taken immediately before exercise, heart acting normally.

FIG. 4 (*b*).

Tracing taken immediately after exercise, heart exhausted.

FIG. 4 (*c*).

Tracing taken after about two minutes' rest, heart recovering.

temperate male of considerable athletic powers. His health had been somewhat deteriorated by tropical fever, of which he had had some recent occurrences, and also quite lately by a sharp attack of sore-throat in connexion with an alveolar abscess. Before this occurred he was in training. Last year he "fainted dead away" for three-quarters of an hour after running half a mile. Says he had over-trained. I have no note of his heart's sounds, but I think there is no doubt they were normal. The tracings almost speak for themselves. The first shows a vertical rise of considerable height, a pointed top, a fairly regular rhythm. In the second, just after the brief exertion—running three times up and down the stairs of a medium-sized house—the rise is low, not one-third of the first, much sloped; the top is flat, and a respiratory undulation is marked. If this be compared with Figs. 1 and 2, or with those given in a paper in THE LANCET, June, 1876, on "the effect of brief exertion on the radial tracing," the reader will appreciate how ill the heart had endured the test.[1] The third tracing, taken some minutes later, shows plainly that the heart was recovering; the rise is higher considerably, and its rate of contraction less rapid, but the tops are still flat, and there are intermissions from prolonged diastoles. In both these instances the dynamic test gave information which could not, I think, have been otherwise obtained as to the non-validity of the central organ of the circulation. There is great probability that what is true of it in reference to bodily exertion would hold good in reference to acute disease (say a low fever) or heat. The heart that stands strain of one kind will probably stand others also.

This view may, perhaps, prove to be of practical utility. Of what advantage is it to send out youths with highly cultured brains to our tropical dependencies if their hearts and vessels will not endure the hot climate? We cannot tell whether they will or not by any examination of their organs at rest, but we might make some tolerable approximation to a right conclusion if we applied our instruments of precision after hard exercise or in Turkish baths. Graves formed his prognosis of fever patients in a like way.

In all the tracings *a* denotes being taken *before* exercise, *b* and *c* *after*.

[1] It is true that on that occasion the exercise was much less fatiguing than what N. M—— took, but in a recent trial with a somewhat younger man, I find the only effect produced by the very same exertion is to lower the rise and accelerate the rate, the rhythm and form not being altered.

ANEURISM OF THORACIC AORTA TREATED BY ERGOTINE INJECTIONS AND GALVANO-PUNCTURE.

BY ALFRED H. CARTER, M.D. LOND., M.R.C.P.,
PHYSICIAN, QUEEN'S HOSPITAL; JOINT PROFESSOR OF PHYSIOLOGY, QUEEN'S COLLEGE, BIRMINGHAM.

G. J——, aged forty, was admitted into the Queen's Hospital under my care on March 12th, 1877, with the following history:—Had always enjoyed good health until July, 1876, when, engaged in pitching some wheatsheaves, he "strained his chest." He felt but little pain at the time, but shortly afterwards complained of some considerable discomfort between the shoulders, preventing him from work, for which he consulted a doctor. From this, after a rest of some weeks, he appeared to recover entirely, and all seemed to go well with him till about a month ago, when pain recurred under the right clavicle, worse on the least exertion, and almost disappearing when quite at rest, accompanied with palpitation and some shortness of breath. At the same time he first noticed swelling and slight pulsation midway between the clavicle and nipple on the right side. The patient was of sober habits; had syphilis (?) about nine years ago; family history good.

On admission, in addition to the foregoing symptoms, it was noted that the pain radiated down the inner side of the right arm, and that a sense of oppression was experienced when he lay on either side; a slight, tickling cough, without expectoration, and no dyspnœa except on exertion; swallowing caused pain in the region of the swelling. Pulse 82 (no difference in the two radials); respiration 22; temperature 98·4°. On physical examination, the appearance of the chest, as regards its outline and movements, was normal, with the exception of an undulating pulsation about the sternal end of the second right interspace, of maximum intensity at the lower edge of second rib, 2¾ in. from the middle line, and synchronous with the apex-beat of the heart, as seen and felt in the fifth left interspace in the nipple line. On light percussion, the anterior margin of the right lung was found to coincide with the right sternal border, from the base as high as the third interspace; thence it deviated to the right, being at the second rib 2⅝ in. from the middle line. In other respects the percussion was normal both front and back. On auscultation at the apex of the heart, the sounds were muffled, and the first sound slightly prolonged; at the base they were weaker and still more muffled, but no distinct murmur. At the point of maximum pulsation, a soft systolic murmur was distinctly heard; the respiratory sounds were normal; further examination of other parts revealed nothing unusual. He was ordered meat diet, with fifteen grains of iodide of potassium and ten grains of the bromide three times a day; also a linctus for the cough.

March 28th.—Ordered two minims of ergot solution (made for me by Wyley and Co., of Coventry) to be injected subcutaneously in the neighbourhood of the swelling every other morning.

April 8th.—The ergotine was ordered to be increased to three minims, and repeated every morning.

May 20th.—The injections have been continued, have given rise to no discomfort beyond sharp pain for a few minutes immediately after the operation, which was always relieved by the application of a hot fomentation over the spot. The general condition has greatly improved, the pulsation can scarcely be felt, and the murmur almost inaudible. It may be added that during the whole of this time he was kept confined to his bed.

June 21st.—Discharged, greatly relieved, with scarcely perceptible pulsation, and complaining of no pain.

On Sept. 17th he was readmitted, as latterly the symptoms before mentioned had returned, and the swelling in the right chest-front had increased once more. A note from the ward case-book says: "The subclavicular pulsating swelling is decidedly more prominent than has been before observed, its general outline has extended and its point of maximum pulsation has passed a little further to the right. Complains of pain in the right shoulder extending down right arm as far as elbow, and also in the right side and between the shoulders, increased on taking a deep breath,

and coughing. The heart-sounds and systolic murmur as when first admitted."

Sept. 22nd.—The ergotine injections to be repeated, and ice to be applied intermittently to the swelling.

Oct. 6th.—As the swelling showed no signs of diminution, and the pain was considerable, electro-puncture of the aneurism (for there was no doubt about the diagnosis) was determined upon. The apparatus employed was Stöhrer's constant-current battery and a pair of needles admirably insulated in gum-elastic by Weiss. At 10.50 A.M. both needles were introduced into the aneurism connected with the anode and kathode respectively of two cells of the battery.—11.3 A.M.: The positive needle not appearing to be thoroughly within the aneurism, it was removed, and immediately re-inserted a little further to the right. The impulse is less, especially in the neighbourhood of the negative needle.—11.10 A.M.: Number of cells increased to four; slight discomfort felt, and some redness round the negative needle.—11.20 A.M.: Pulsation decidedly less, and the bruit is not so obvious.—11.25: Burning pain being complained of, the current was stopped.—11.30: The current was renewed with two cells. The burning pain returned, and swelling appeared round the negative needle, which crackled under pressure.—11.40: Needles withdrawn. No hæmorrhage beyond a slight oozing from the puncture of the negative needle. The pulsation is somewhat less, but the swelling has increased, owing to the subcutaneous emphysema just noted. Dressed with a pledget of lint soaked in styptic colloid, and bound down with strapping.—7 P.M.: The emphysema has disappeared, and the patient is comfortable, though there is no perceptible improvement in the aneurism.

15th.—Since the last note the aneurism has very obviously extended; it is more superficial; a distinct hemispherical protrusion exists, which notably pulsates. During the interval ice has been applied intermittently, and scruple doses of iodide of potassium administered every four hours. It has been decided to repeat the galvano-puncture.

16th.—The operation was repeated.—12.25 P.M.: Two needles were introduced, as before, without difficulty, and connected with twelve cells of Stöhrer's battery only immersed half way in acid.—12.40: The current was reversed.—12.53: Current again reversed; prominence notably less, and firmer. Some redness round each needle. Complains of slight pain in the neighbourhood of the aneurism.—1.10 P.M.: The needles were withdrawn. Decided improvement. The systolic murmur has disappeared.

26th.—The external prominence has disappeared, but a soft systolic bruit has returned, and the condition of the aneurism is much as it was before the first operation.

Nov. 15th.—A slight tonsillitis supervened, which passed off under treatment in a few days.

29th.—Galvano-puncture ordered to be once more repeated. At 12.20 two needles were introduced as before, and connected this time with eight cells, immersed only half way in acid. No change in the direction of the current was made during the operation, which lasted until 12.56. The patient did not complain of any pain. The punctures were afterwards dressed with lint and styptic colloid; and a sand-bag was applied over the dressing.

Dec. 2nd.—The pulsation much less distinct, and more diffused. No pain. Temperature normal.

12th.—The pulsation has decreased to a scarcely perceptible diffused shock. The systolic murmur has disappeared. There is no pain, and his general health is good. Discharged, greatly relieved.

Remarks.—The case related is of much interest from several points of view. First, as to its causation. A man who considered himself quite healthy and strong, and had had no previous illness beyond "syphilis" (of which, however, he cannot give a very circumstantial account), strains himself at work, and to this strain attributes his after-condition. There is no evidence of his heart or aortic orifice being implicated. Can it be that the inner coats of his aorta, weakened by incipient atheroma, or fatty degeneration, to which he was predisposed by a syphilitic taint, were partially ruptured at the time of the alleged "strain"? Whether this be so or not, it would seem clear that his age, his previous health, his freedom from valvular disease of the heart, and the absence of indications of advanced atheroma, would mark the case (circumstances admitting) as one peculiarly adapted for direct treatment.

Iodide of potassium was first administered in doses of fifteen grains, combined with the bromide, thrice daily. Beyond absolute rest in bed, this was the sole treatment adopted for a fortnight, with no improvement in the patient's condition. It may be rightly argued that the drug was not fairly tried, either as regards the dose or the length of time for which it was administered, but anxiety to leave no stone unturned for his relief prompted me to supplement the iodide of potassium with other treatment. Accordingly a trial was made of ergotine hypodermically injected, as first recommended, I think, by Langenbeck, of Berlin. I have given this treatment frequently repeated trials, and though its use has occasionally been attended with marked benefit, yet it has more often quite disappointed my expectations. Its mode of action is very doubtful. It appears to me by no means improbable that the nutrition of the sac-wall may be so modified or disturbed by such injections as to favour coagulation of the blood within it. Bacchi,[1] assuming that such remedies can only be supposed to act by inducing *contraction* of the sac-wall, pronounces them as "..... tout à fait inutiles. En effet, l'idée que la paroi du sac pourrait se contracter sous l'action de certains médicaments est une idée complètement bizarre, et qui ne repose sur aucun fait certain," and thus dismisses the subject.

Be all this as it may, however, our patient expressed himself as greatly benefited by the injections, which, combined with the iodide of potassium treatment and absolute rest, enabled him to be discharged on June 21st, "greatly relieved, with scarcely perceptible pulsation, and complaining of no pain." On his readmission, some three months later, the same treatment was renewed, but this time without success. It should be remembered that the aneurism was now of more serious character than had hitherto been noted.

On Oct. 6th galvano-puncture of the aneurism was performed for the first time. With regard to the apparatus employed, my experience leads me to the conclusion that not only should the needles be insulated, but they should be as fine as possible. Since my last operation Weiss has produced a much finer needle than that previously used by me. I am inclined also to think that the points, instead of being three-edged, should be two-edged (lancet-shaped), though not too tapering. This modification would enable them to pass through the skin and walls of the aneurism with much greater facility, which I am sure is a question of very great importance. If very much force is necessary (as is frequently the case) for their introduction, not only is great pain experienced, but the difficulty of getting the needle thoroughly within the aneurism is much greater. When first operating on the present case, the negative needle was only introduced with great difficulty, owing to the toughness of the skin and the wall of the aneurism. The subsequent occurrence of emphysema round the needle, and the rapidity with which the aneurism increased and became superficial at that point, leave no doubt in my mind that the negative needle never got properly within the aneurism. The gas generated at the negative pole and escaping into the tissues would account for the emphysema which occurred; and, moreover, the alkaline caustic products of electrolysis at the same spot would tend to induce local inflammation and softening of the aneurism, and ultimately lead to a rupture of the wall, and a secondary sac would thus be grafted, as it were, on the primary sac. This result was enhanced perhaps by the fact of the cells employed being too large and too deeply immersed, and thus too powerful for the purpose. In the second and third operations in this case, it will be noted that a larger number of cells was employed, but only half immersed in acid, and with much better results. This point is well insisted upon by Dr. Poore in his admirable little work on Electricity.

With regard to the construction of the needles, since they are now of such very delicate proportions, the point of the positive needle is very quickly destroyed in the process; hence it is advisable that about half an inch from the point should be left uninsulated—a precaution that, if observed, will admit of their being repointed for subsequent use. It is highly important that *both needles should be introduced into the aneurism.* Further experience seems to confirm (notwithstanding the opinions of Clifford Allbutt and McCall Anderson to the contrary) the older views of Ciniselli of Cremona, that the dangers arising from the escape of gas and emboli into the general circulation are, for the present, more theoretical than practical. Coagulation proceeds under these circumstances more rapidly; the clot is more extensive, and hence more likely to secure the result desired. As to the

[1] Bull. de Thérap., 15 Aout, 1878.

duration of the operation, I have usually kept up the current from half to three-quarters of an hour. In the present case the first operation lasted fifty, the second forty-five, and the third thirty-six minutes.

In conclusion, I would briefly comment upon the results of these successive operations. In the first case, as I have before implied, I attribute the failure to an imperfect introduction of the needles, and the employment of too strong a current. In the second operation the aneurismal sac was so superficial that both needles were very readily and completely introduced, with the most satisfactory results. I do not consider an external tumour, by the way, to contra-indicate treatment by electro-puncture, so long as the bony elements of the thoracic parietes are not seriously involved. On the contrary, the facility with which the needles can be introduced and manipulated renders such cases, *cæteris paribus*, peculiarly suitable for treatment by this method. The secondary sac (assumed to have formed) was considered to have been completely obliterated by this operation. The satisfactory results so far encouraged me to make one final attempt still further to reduce the aneurism. The result exceeded my most sanguine expectation, and the man was discharged in excellent spirits and fair general health, very greatly relieved, though not so completely as to justify our regarding it as a cure.

I am indebted to my late house-physician, Mr. J. Spofforth, for the notes of this case.

Birmingham.

THE IDENTITIES OF CEREBRO-SPINAL MENINGITIS, DENGUE, AND YELLOW FEVER.

By DR. CADDY,

DEPUTY INSPECTOR-GENERAL OF HOSPITALS AND FLEETS.

(Continued from page 727.)

JOSEPH M. T——, aged twenty-eight, carpenter's crew of H.M.S. *Endymion*, was put on the sick-list on the 5th of April, 1847. Complained last night of frontal headache and extreme debility. Countenance sallow; thirst considerable. He had been on leave a few days before for forty-eight hours. Bloodletting from the arm to four ounces caused fainting; he afterwards perspired freely, took ten grains of calomel, and had his bowels opened by compound jalap powder. 8.30 A.M. (in hospital): Complains of severe frontal headache. Has orbital tenderness, hot skin, and thirst; pulse 108; tongue clean and moist; bowels three times moved. Temperature beneath the tongue 100°. Rested badly last night, and is at present drowsy. 11.30 A.M.: Stomach irritable. 5 P.M.: Has had no return of the vomiting. Has less headache and orbital tenderness; skin pungently hot. Temperature beneath the tongue 104°; pulse 96. Thirst urgent; tongue dry; sordes about the teeth. Bowels three times moved.—April 6th, 3 A.M.: There is vomiting. 6 A.M.: Restless night. Considerable heat and dryness of skin. No return of the vomiting since the mustard sinapism. Pulse 96, intermitting. Is at present sleeping. 1.30 P.M.: Irritability of stomach has returned. 5 P.M.: The irritability of stomach is checked. Patient very much distressed. No headache; skin warm; pulse 78; thirst urgent; features pinched; sordes on the teeth; tongue dry. Three dark-coloured stools. — 7th, 12.30 A.M.: There has been slight irritability of stomach. Pulse slow, easily compressed. Appears greatly depressed. 6 A.M.: Very restless night; irritability of stomach continues, with depression. Heat of surface nearly natural; tongue dry; thirst urgent; pulse 84, small. Has passed a quantity of dark-coloured, greenish fluid by stool. 2 P.M.: Vomited a large quantity of dark-coloured fluid. Feels very weak. 3 P.M.: Vomiting of a similar fluid has returned. Passed by stool a quantity of dark-coloured matter. 5 P.M.: Incessant vomiting of bloody fluid. Pulse hardly perceptible; respiration hurried. 8 P.M.: Irritable stomach; extremities becoming cold. 10.40 P.M.: Died.

Autopsy, eight hours after death.—The surface was of a jaundiced yellow colour. Some lived patches were seen on the back and the sides. The cellular tissue was yellow, and the muscles of a bright-red colour. Cadaveric rigidity complete. The cavity of the arachnoid contained some straw-coloured serum. The pia mater was vascular. There was effusion of sanguinolent serum between the convolutions, and the structure of the brain was less firm than usual. The puncta vasculosa were very numerous, and the lateral ventricles contained some serum. The cerebellum was somewhat softened, and its fossa with the spinal canal contained some straw-coloured serum. The small veins between the convolutions of the brain were much congested. The pericardium contained two ounces of amber-coloured fluid, and the channels of communication with the heart contained a quantity of dark blood. The lungs were congested. On reflecting the abdominal walls, nearly the whole of the intestines were of a livid colour. The stomach contained a pint of black vomit; the mucous membrane was rugous and of a dark colour. The mucous membrane of the intestines was covered with a black sanguineous-looking fluid, and of a dusky-red colour. The liver friable, of a fawn colour. The gall-bladder contained some black bile; its ducts with, the liver and the duodenum, pervious. Spleen normal. Kidneys enlarged, flabby, and congested. The portal vein was filled with dark blood.

Restlessness, drowsiness, and weakness; severe frontal headache, and tenderness on pressure of the eyeballs, followed by irritable stomach and irritable bowels; animal heat once noted at 104°; all soon overtaken by intermittent pulse, black vomit, and cold extremities. These collective symptoms, with the light gathered from the autopsy, show early blood stagnation or poisoning, and the parts most plentifully supplied with blood (brain and intestines) favour this conclusion.

H. H——, aged twenty-one, seaman of H.M. ship *Endymion*, was put on the sick list the 5th of April, 1847, with headache and pain in the epigastrium and general debility. Countenance cheerful, but yellowish and sometimes covered with perspiration. Tongue foul; pulse small; skin cool. Had ten grains of calomel, and afterwards one drachm of compound jalap powder.—April 5th, 6 P.M. (in hospital): Attacked at 4 A.M. with rigors and chills, which lasted until 7.30 A.M., also headache and orbital tenderness, pains in the back, the limbs, and the epigastrium, with tenderness on pressure. Temperature of surface nearly natural; pulse 106, small, irregular, and easily compressed. Thirst urgent. Stomach quiet; bowels moved three times by the medicine. Tongue clean, moist.—6th: A tolerably quiet night. An hour since complained of pains in the limbs. At present sleeping.—11th, 5 P.M.: Has less headache. No orbital tenderness. Pains of the back and limbs. Less thirst. Heat of surface; temperature by thermometer, 102°. Stomach retentive. Three dark-coloured stools. Pulse 96. Complains of gums being tender.—7th, 3 A.M.: Vomited a clear fluid after taking his medicine. 6 A.M.: Pain of the abdomen without tenderness on pressure. No headache or orbital tenderness. Vomiting returned half an hour since. Temperature by thermometer 99°. Thirst moderate. Pulse 96. Tongue clammy. 5 P.M.: Irritability of stomach on taking food. Had three slight dark-coloured stools. 8 P.M.: Inclined to delirium.—8th, 3 A.M.: Vomiting of a dark fluid. Pulse 84, soft and easily compressible. 6.30 A.M.: Has had no return of vomiting. Temperature by thermometer, 99°; pulse 72. Bowels opened this morning. Complains of a sense of constriction at the lower part of the throat. 5 P.M.: Retching a few minutes since. No headache or orbital tenderness. Uneasy sensations of the abdomen. Pulse 72, small, compressible. Little thirst. 8 P.M.: Restlessness and incoherent talking. Passed a dark, slimy, fetid stool.—9th: Restless night; retching. Pain across the lower part of the thorax. Is free of headache. Conjunctivæ injected. Pulse 66. Skin natural. Bowels not open. 5 P.M.: Slept at short intervals during the day. Pain of the thorax relieved. Skin acting gently. Stomach retentive. Temperature by thermometer 101°. Two stools, more natural in character. 8 P.M.: Incoherent talking. Tongue dry.—10th: At midnight vomiting of a dark-coloured fluid, and passed half a pint of blood by stool. Since then the stomach has been quiet. At present in a semi-comatose state, with muttering and incoherent talking. Pulse 60, small and weak. Respiration hurried. Tongue dry and red.—10th, 2.30 P.M.: Attacked with convulsions. 5 P.M.: Insensible, and vomiting a small quantity of dark-coloured grumous fluid. Extremities cold. Pupils fixed. 8 P.M.: Died.

Autopsy, nine hours after death.—Head, neck, and trunk of a jaundiced yellow colour, as also the cellular tissue.

The extremities of a less yellow hue. On the back some livid patches. The muscles of a bright red. Some slight opacity in parts of the arachnoid, with slight effusion in its cavity. The pia mater vascular, with effusion of thin sanguinolent serum between the convolutions of the brain. The puncta vasculosa very numerous, and the brain-substance deficient in firmness. Half an ounce of straw-coloured serum in the lateral ventricles, which were very capacious, and deeper than usual, and in the descending cornu of the left ventricle were some clots of blood. The cerebellum was soft in texture, and poured forth on section a thin sanguinolent serum. The cerebellar fossæ and spinal canal contained about four ounces of turbid, straw-coloured serum. The sinuses of the dura mater and the small veins between the convolutions of the brain contained a quantity of dark fluid blood. The pericardium contained half an ounce of very yellow serum. The vessels to and from the heart contained a quantity of dark fluid blood. The muscular walls of the heart normal. The lungs congested, and old pleuritic adhesions of right side of chest. On reflecting the abdominal walls, the coats of some portions of the intestines were of a livid colour, in other parts a reddish brown. The stomach contained about half a pint of black fluid, and its mucous membrane presented a large patch of a reddish-brown colour; the mucous membrane of the small intestines throughout was of a reddish-brown; that of the large intestine of a dark ashy colour. The liver friable, of a fawn colour. The gall-bladder empty; its ducts pervious. Spleen normal. The kidneys flabby and congested, and the urinary bladder empty. The portal vein filled with blood.

Debility and epigastric tenderness on pressure. Headache with orbital tenderness, and on the second day in hospital pains in the limbs. Animal heat 102°. Dark-coloured, tender gums from the calomel taken. With the vomiting on the third day there was no headache or orbital tenderness, but temperature 99°, and pulse 96, bespeaking prostration with excitement, and the black vomit, stools, delirium, and restlessness. Yellow fever in the earlier symptoms often has little to guide a prognosis.

D. P——, aged twenty-two, seaman of H.M.S. *Endymion*, was put on the sick list on April 5th, 1847, in the morning, complaining of frontal headache and orbital tenderness. The conjunctivæ were much injected; pupils rather contracted and sluggish; much heat and dryness of skin; temperature by thermometer 102°; pulse 114; respiration not much affected; stomach retentive; bowels once moved; tongue coated, dry. Had been recently on leave. Before coming to the hospital he took eight grains of calomel and one drachm of compound jalap powder. 8 P.M.: Skin very hot and dry; bowels not moved since admission; very restless. On shipboard a little bleeding from the arm produced fainting.—April 6th: During the night dark-coloured and offensive stools passed involuntarily; is very drowsy, and cannot be made to answer questions; pupils contracted, sluggish; heat of surface moderate; skin dry; temperature by thermometer 100°; pulse 102; thirst urgent; tongue dry and brown. 5 P.M.: Drowsiness, and can with difficulty be roused; no headache, but complains of pain in the lumbar region; heat of surface; tongue coated, dry; thirst urgent; five offensive evacuations, of a dark colour.—7th, 12.10 A.M.: Vomiting of a blackish fluid, with coffee-ground-looking particles; pulse 96, weak, and easily compressed; skin hot; great stupor; occasional delirious incoherency; stools of a white, slimy mucus, with black coffee-ground fluid. 3 A.M.: Incoherent talking; stomach quiet. 6 A.M.: Is rather less drowsy; teeth covered with sordes and dry; stomach quiet. 5 P.M.: Vomited at intervals a dark grumous fluid. When spoken to, complains of general soreness. Skin cool; pulse just perceptible. 8 P.M.: Stomach has been quiet; pulse improved; skin normal.—8th, 3 A.M.: Is restless and moaning. At present no vomiting. Much depressed. 6 A.M.: Is very drowsy and less restless; the depression continues; has tenesmus, with a stool consisting of pitchy-coloured mucus; pulse more perceptible. 5 P.M.: Restlessness, with singultus. Stomach retentive during the last two hours. Had effervescing draughts. Deep-yellow tinge of the body. Great prostration. 8 P.M.: Very restless. A dark-coloured, slimy stool. Stomach retentive. 10.30 P.M.: Return of singultus. Groaning and restless. Complains of pain of the abdomen. 11.30 P.M.: Vomited a quantity of dark-coloured grumous fluid.—9th, 2 A.M.: Is retching and very restless. 6 A.M.: Vomiting of dark-coloured fluid. Pain in the abdomen continues, but is relieved by the fomentation. 9.30 A.M.: No return of the vomiting. Fomentations give temporary relief. Is very restless. Moaning, with singultus. 2 P.M.: Easier since the last report. The enema came away without fæces. Singultus, with wandering. 3.45 P.M.: Singultus, with vomiting of a quantity of dark-coloured fluid. 5 P.M.: Retained the last draught. Less moaning and kicking off the bedclothes. Skin warm; pulse 104, tolerably firm. 8 P.M.: Vomited recently a dark-coloured fluid. Less moaning; heat of skin; drowsy.—10th: No return of the vomiting. Scarcely coherent; gums hæmorrhagic. At noon he died.

Autopsy, three hours after death.—The surface was of a livid-yellow colour, the cellular tissue very yellow, and its incised surfaces poured forth a quantity of dark venous blood. The muscular fibres were of a dark-red colour; cadaveric rigidity complete. There was effusion in the arachnoid cavity; the vessels of the pia mater much congested. Effusion of sanguinolent serum between the convolutions of the brain. The substance of the brain deficient in firmness, and the puncta vasculosa very numerous. The lateral ventricles contained some thin, bloody fluid, and the vessels ramifying on the walls of the ventricles were much congested. The texture of the cerebellum was softer than natural. The cerebellar fossæ and the spinal canal contained some bloody serum, and the incised surfaces of cerebellum poured forth some bloody serum. The sinuses of the dura mater and the small veins between the convolutions of the brain were filled with dark blood. The pericardium contained some straw-coloured serum; the vessels to and from the heart on section poured forth a quantity of dark blood; its cavities normal. In the right pleural cavity at the upper and outer part were old adhesions. The lungs congested. On reflecting the abdominal walls, the coats of the intestines were in some places livid, in others of a reddish-brown colour. The stomach contained half a pint of black vomit, the mucous membrane of a reddish colour, and the rest of the intestinal canal of a dark-red colour coated with a pitchy-looking fluid. The liver of a fawn colour, and friable. The gall-bladder contained some pitchy-looking bile; its ducts pervious. Spleen normal. Kidneys flabby and congested; the urinary bladder empty.

This seaman had red hair and the usual sunburnt complexion. I have often observed the proclivity to fever is in proportion to the fairness of the complexion, and such temperaments are sometimes severely tried. The daily records of these cases are the senior medical officer's.

(To be concluded.)

ON THE DIAGNOSIS AND TREATMENT OF IDIOCY, WITH REMARKS ON PROGNOSIS.

BY FLETCHER BEACH, M.B., M.R.C.P.,
MEDICAL SUPERINTENDENT OF THE CLAPTON ASYLUM.

UNTIL a few years ago the great and vital differences between a lunatic and an idiot were not fully recognised, notwithstanding papers on the subject by various authors, and hence the fact that these two classes of cases require different modes of treatment has not been fully appreciated. At the present moment there are many idiots shut up in lunatic asylums—institutions, I need scarcely say, quite unfitted for their reception, and where no special arrangements are made for their treatment. The Commissioners in Lunacy remark in their report for 1865:—"It has long been our opinion, as the result of extended experience and observation, that the association of idiot children with lunatics is very objectionable and injurious to them, and upon our visits to county asylums we have frequently suggested arrangements for their separate treatment and instruction. It is always to us a painful thing to see idiot children, whose mental faculties and physical powers and habits are capable of much development and improvement, wandering, without object or special care, about the wards of a lunatic asylum." A lunatic, especially one in a state of acute mania, is a person in whom there is great "exaltation of the senses, the intellect, and the will."[1] "There is increased mental activity, and this being propagated to the organs of motion causes great physical restlessness, and the patient is constantly speaking, shouting, weeping, storming, &c."[2] He is

[1] Esquirol, des Maladies Mentales.
[2] Griesinger, "On Mental Diseases," Sydenham Soc. Trans.

also the victim of many delusions. An idiot, on the other hand, is one in whom there is "mental deficiency, depending upon non-development, mal-nutrition, or disease of the nervous centres, occurring either before birth or before the evolution of mental faculties in childhood."[3] His intellectual faculties "have never been developed sufficiently to enable him to acquire such an amount of knowledge as persons of his own age and placed in similar circumstances with himself are capable of receiving."[4]

I am aware that the definition of a lunatic above given does not include states of monomania, melancholia, and dementia, but to impress the great difference between a lunatic and an idiot upon my readers I have thought it well to take an acute case.

An imbecile is generally understood to be one in whom there is a less degree of mental deficiency than is present in the idiot. Idiocy has a superficial resemblance to dementia, but in the former case the intellect increases under proper training, in the latter it diminishes. For my own part, I prefer the word imbecility to idiocy, including under the former term all cases, from the lowest to the highest type, in whom there is mental impairment present at the time of birth, or supervening during infancy and childhood; and I would divide imbecility into two classes—congenital and acquired. The use of the two terms, idiot and imbecile, I have found lead to confusion, especially when one has to give a definition of, or exhibit, cases to those unacquainted with the subject, it being often difficult to say under which class such and such a patient should be placed. By the use of the word "imbecile" this difficulty would be avoided, and all cases would be easily divided as above mentioned. Idiocy, though not a scientific term, is, however, a legal one, and is sanctioned by long usage, and in spite of my argument will, I fear, exist to the end of time.

Between the imbecile, using the word in the above sense, and the *acute* lunatic, a wide gap exists, and the treatment of each is entirely different. The former has intellectual faculties, which, in cases of low type, have never been manifested; the latter has them also, but they have become disturbed. The faculties of the imbecile have to be developed, while the excitability of the lunatic has to be repressed. By many, idiots are supposed to be creatures of so low a type as to be almost incapable of improvement, and little removed from the lower animals. There can, however, be no greater mistake. There are many varieties of idiocy, which, to a great extent, run closely into one another.

In some the senses are extremely deficient; they are listless and apathetic; others are mischievous and destructive, with little power of attention; others, again, are only backward, and little removed in intellect from some children. All are improved by treatment.

Before entering upon the diagnosis of idiocy, it will be necessary to say a few words on classification. Many systems have been adopted.

Esquirol based his upon the power of speech possessed. According to him, in the lowest stage there is neither speech nor phrases, words nor monosyllables; a little higher in the scale there is articulation only of monosyllables or certain cries; still higher, words and short phrases are used, till we come to those who can not only speak, but feel and think. An objection to this classification is that we sometimes "meet with idiots who can talk, but who in other respects belong to a very low type."[5]

Bucknill and Tuke regard the various stages of idiocy according to the degree in which the reflex and volitional functions are manifested, and speak of three classes: "First, those who exhibit nothing beyond the reflex movements, known as the excito-motor; secondly, those whose reflex acts are consensual, or sensori-motor, including those of an ideo-motor and emotional character; thirdly, those who manifest volition, whose ideas produce some intellectual operations, and consequent will."

Langdon Down divides cases into those which have a developmental, and those which have an accidental origin.

Ireland classifies from a pathological point of view, and divides idiocy into ten classes, "which he has generalised from individual existing idiots, who resemble one another by having the same or similar diseases, as they resemble the type of idiocy by having mental deficiency along with a corporeal disease." He divides cases into congenital idiocy, microcephalic idiocy, hydrocephalic idiocy, and the like.

I propose to classify, under the headings of Congenital and Acquired Imbecility,[6] including under the former those occurring at the time, under the latter those supervening after birth.

IMBECILITY.

I. Congenital.	*II. Acquired.*
1. Simple congenital.	1. Eclampsic.
2. Microcephalic.	2. Epileptic.
3. Hydrocephalic.	3. Paralytic.
4. Scaphocephalic.	4. Hydrocephalic.
5. Paralytic.	5. Inflammatory. *a*, hypertrophic.
6. Cretinism (sporadic and endemic).	6. Traumatic.
	7. Cretinism (endemic).

These acquired cases have by some been called cases of primary dementia.

In diagnosing imbecility in infancy we should observe the size and shape, with reference to symmetry, of the head (heads below thirteen inches in circumference rarely containing much intelligence); whether there is inability to support it, so that it hangs back motionless; whether inability of the spine to support the body; any flaccidity of the limbs; any difficulty in swallowing the milk drawn from the breast; whether the infant is capable of grasping one's hand; whether any notice is taken of passing objects, and what capability of following them with the eyes; whether any notice taken of sound; any voice. The facial aspect should also be marked (that the patient is of low type can often be seen at a glance); the presence of strabismus or nystagmus should also be noted, as well as the distance between the eyes, these being too nearly approximated in microcephalic and too widely separated in hydrocephalic cases. The position (oblique or not) of the eyes should be noticed, the former being found in the Mongolian variety. The integument about them should be examined for semilunar folds of skin at the inner canthi, called by Dr. Langdon Down epicanthic, and the position of the ears, whether implanted far back or not, should be observed.

There is sometimes little difficulty in making a diagnosis, but should few characteristics be present, we must be guided by the amount of reflex and volitional movement manifested.

Later on, we compare the child's intellect with that of other children of the same age (this seldom fails to aid us). We observe whether the fontanelles are closed; the shape of the palate, a highly arched, or, on the other hand, an elongated one being often present in congenital imbecility; the grasping power of the hands, which may be little in imbeciles; the presence or absence of automatic movements, contractures, or spastic rigidity, these symptoms being often present in cases of low type; whether there is any flow of saliva from the mouth; the state of the circulation (usually feeble in imbeciles); the amount of development of the senses; the presence or absence of will; the presence or absence of epilepsy.

I pass on to the description of various types of imbecility, taking congenital cases first.

1. *Simple congenital.*—These cases form a large class, comprising some of the least and some of the most improvable patients. I have selected two to illustrate it. The first, a boy aged fourteen, is of low type. He has a somewhat animal face, with pug nose, thick lips, and large ears. The outline of the head, which measures nineteen inches and three-quarters in circumference, shows it to be narrow in front, a region by some considered to be the seat of the intellectual powers. There is a history of phthisis on both sides of his family, and his father is very nervous. During pregnancy the mother was subjected to considerable trouble. On admission he was unable to speak or utter a sound. The circulation was feeble, the special senses defective, little power of observation and imitation being present. His attention could only be arrested for a very short time. He was subject to occasional fits, and was very vicious. After three years' training his attention can be engaged for about five minutes. Can say "mother." Tries to say "one" in counting. Is interested while in school, and has become less vicious and noisy. He cannot wash or dress himself, but has learnt to feed himself. He is usually clean in his habits, and has now no epileptic fit. Little progress has been made, and we cannot expect much improvement. Cases

[3] Ireland, "On Idiocy and Imbecility."
[4] Esquirol, opus cit.
[5] Bucknill and Tuke: Manual of Psychological Medicine.

[6] I use the word imbecility in the sense I have previously given, and include under it all cases, whether of low or high type.

of lower type than this do, of course, occur, but the above represents very fairly a low type imbecile. The next case, a boy aged fifteen, is of a much higher type. He is nice-looking, with some intelligence, rather excitable and pugnacious, but sociable. His articulation and hearing are defective. His family history is good, but his mother had a severe fright during pregnancy. On admission his head was found to measure twenty-one inches and a half in circumference, and the outline shows it to be of a more normal shape than the preceding one. He could read only two letters of the alphabet when admitted, but could copy words from a book. He could not recognise any colours. After two years' treatment we find that he has made good progress in school; he works well as a tailor, and plays in the fife-and-drum band. Considerable improvement may be expected.

2. *Microcephalic.*—These are cases with small heads at the time of birth. At one time it was held that the small size of the brain was owing to the sutures closing in and hindering its growth, but since then many cases of microcephaly have been collected with open sutures, so that this theory must be abandoned. Voisin says that the proper exercise of the intellectual functions is impossible with a head of from eleven to thirteen inches in circumference. He thinks that heads from fourteen to seventeen inches in circumference are too small for ordinary intelligence, but that heads of from eighteen inches to eighteen inches and a half, though small, allow of the regular exercise of the intellectual faculties. We must remember, however, that the amount of intellect depends not so much upon the size of the brain as upon the amount and quality of the grey matter. A boy who died some time ago in this asylum had a brain which weighed sixty-two ounces, chiefly due to hypertrophy of the white matter, and though he was not by any means one of the worst cases, he was never considered to be one likely to be discharged to earn his own living in the world. I think we may say, with Dr. Ireland, that below seventeen inches in circumference the manifestations of intellectual power would be feeble.

The first case I will shortly allude to is that of a girl aged twelve, who died some time ago in this asylum. Her head measured twelve inches in circumference, and her brain weighed only seven ounces. She was able to recognise those around her, became cleanly in her habits, and made an attempt at articulation. She could not stand or walk. The brain, though small, is of the human type, the convolutions being only very simple in character.

The next case is that of a girl, aged four years, whose head measures fourteen and a half inches in circumference. There is a history of epilepsy on the mother's side of the family. The patient is unable to stand or walk, and is extremely deficient in intelligence. There is rigidity of the limbs, with no grasping power, and atrophy of the optic nerves. She has slightly improved; can recognise those around her, and is more cleanly in her habits. Not much improvement can be expected. The outline of the head which has been taken shows its small size. Another case is that of a boy, aged thirteen, whose head measures 17⅛ inches in circumference. He has a somewhat birdlike appearance, and though he has observation, imitation, and some power of attention, he has little knowledge. He is lively and good-natured, laughs when spoken to, and can say "Yes" and "Ah." He can wash, dress, and feed himself, and play with the other boys. His palate is highly arched. I find from his mother that he has a brother and sister with small heads, and that his father is very intemperate. Some improvement will take place in this case, as has been effected in the following, who is an inmate of the Lancaster Idiot Asylum. Dr. Shuttleworth's account of him is that his head measures fourteen and a half inches in circumference, and that on admission he was eight years old, very quarrelsome and unmanageable. After three years in the asylum his head was found to have increased three-eighths of an inch in circumference, and as a result of treatment he had become well conducted and fairly sociable. He had learnt to articulate a few monosyllabic words, tried to imitate writing, and match colours, and join in the drilling exercises of the children.

3. *Hydrocephalic.*—These cases may be produced by hydrocephalus coming on before or after birth. The following case is that of a boy, aged sixteen, with a large head, measuring 23½ in. in circumference. He has a feeble circulation, and is weak on his legs. On admission about three years ago he could only count to six. He can now read a few letters, spell a few words, do some of the multiplication table, and has learnt the colours and a few shapes. He can wash and dress himself. He cannot work at any trade. He has had no fits. He will improve to a certain point, not, however, very high.

4. *Scaphocephalic.*—These cases have a keel-shaped head, which may be produced in labour. I am unable to give information on this point, however, as I cannot get the address of the friends of the boy whose case I relate. He is nine years old, very shy, with little power of observation and attention. He does not know even the colours. His circulation is feeble. He cannot wash or dress himself, but he runs about. Some improvement may be expected. His head measures twenty-two inches and a quarter in circumference, and the outline shows its peculiar shape. Of course the brain-structure is defective, there being a tribe of Indians who systematically compress the heads of their new-born children, who, however, are not considered to have less intelligence than those of the neighbouring tribes.

5. *Paralytic.*—These cases may be present either at the time of birth from some intrauterine cause, or come on after birth from infantile paralysis, or as the result of frequent severe epileptic fits. I do not include in this class those who do not use their limbs from want of intelligence. The following case is that of a boy aged nine years, who was born with paralysis of the right side; his mother, when pregnant, having fallen with much violence, striking her side against a wall, and becoming almost insensible for a time. The family history is good as far as nervous diseases go, but there is phthisis on the mother's side. He is cheerful, and can talk clearly. His head measures nineteen inches and a half in circumference, and the outline shows flattening of the left side of the cranium, the side opposite to the paralysis. I do not expect much improvement of the paralysis, but much mentally. To show that even with extreme atrophy of one side of the brain and paralysis of the opposite side of the body there may be fair intelligence, I will refer to the case of a girl, aged eighteen, who died two years ago in the Clapton Asylum. The left lobe of her brain was exceedingly atrophied, weighing only five ounces, while the right lobe weighed fifteen ounces. During life the girl could read, write, spell, do simple rules of arithmetic, and sing well enough to appear on our stage before an audience.

6. *Cretinism, sporadic and endemic.*—I have not had much opportunity of seeing cases of endemic cretinism in this country, but many opportunities of seeing sporadic ones have fallen to my lot. They are stunted in growth as well as deficient in intelligence, and are usually characterised by the absence of a thyroid gland and the presence of fatty tumours in the posterior triangles of the neck, though there are exceptions to this rule. The first case is that of a girl aged fifteen, whose head measured nineteen inches in circumference. She had a pug-shaped nose, thick lips, full and flabby cheeks, short arms and legs, and large hands and feet. She was very fat. She was of a cheerful disposition, went to school in the asylum and learnt to say her alphabet, spell a few words of three letters, and write from dictation two letters. She could add to five, count to fifty, and distinguish three colours. She could hem a little. She was cleanly in her habits, and possessed much more intelligence than others I have seen. Her case is fully related in the *Journal of Mental Science*, July, 1876. A boy aged ten and a half years is much less intelligent. He plays with the other children, and can say a few words. He possesses the same characteristics as the child just mentioned. Very little improvement occurs in this class.

(To be concluded.)

POISONING FROM AN OVERDOSE OF SWEET SPIRITS OF NITRE, RESEMBLING A CASE OF ACUTE ALCOHOLIC POISONING.

BY T. WOOD HILL, L.R.C.P. ED., M.R.C.S. ENG.

I WAS sent for on Thursday, September 26th, 1878, to see a male child aged two years and eleven months, who had climbed up on a chair and taken from off the mantel-piece a stoppered bottle containing between three and four ounces of sweet spirits of nitre, and drunk the contents, during the absence of the attendant. On my arrival, at 1 P.M., I

found him in a complete state of collapse, cold, almost pulseless, insensible, both pupils fixed and widely dilated, breathing hardly perceptible. Before seeing him he had vomited freely, the contents of the stomach being undigested food (no blood), with a smell of spirit; the bowels had been well open. I had him placed in bed between warm blankets, and hot-water bottles applied to the feet and armpits. After an hour and a half the temperature of the body began to grow warmer, and at three o'clock seemed of a burning heat; slight perspiration apparent, pulse slightly improved; strong smell of spirit from the breath. At 6, the vomiting and purging recurred; at 10.30 the breathing became stertorous, and he died at half-past 11, just twelve hours after he had taken the fatal dose, no convulsions having occurred.

Necropsy, three days and a half after death.—Body measured thirty-six inches, well nourished. No external signs of injury. On opening the abdomen, a strong alcoholic odour was emitted. The stomach contained food, chiefly bread, in a state of semi-digestion; the mucous coat was highly inflamed and red near the pyloric end, on the anterior surface of the posterior border, and in one spot very much attenuated. The duodenal end of the small intestines red and inflamed, and bile-stained; the remainder of intestines healthy. Kidneys slightly congested. The other organs healthy. On removing the skull-cap, I found the membranes of the brain highly congested, containing a large quantity of dark-coloured blood. Brain soft, pulpy, and quite wet; vessels congested; no trace of fluid in the ventricles.

Remarks.—This case seems to me worthy of record—first, on account of the rarity of so common a domestic remedy being the cause of death; secondly, as showing the power of deglutition of so potent a fluid in a child of that age.

Earl's Court-road, S.W.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. IV. Proœmium.

ST. MARY'S HOSPITAL.

GLIOMA OF THE RETINA; EXTIRPATION OF THE GLOBE; RECOVERY.

(Under the care of Mr. HAYNES WALTON.)

FOR the following notes we are indebted to Mr. A. J. Pepper, pathologist to the hospital.

A. H——, female, aged seventeen, was admitted on July 1st, 1878, and gave the following history:—The symptoms began four years ago; she then had pain in the right eyeball, which "watered" a good deal. The pain was accompanied by headache of varying severity. No alteration in the appearance of the eye was noticed until seven months before her admission. From that time the pain continued to increase, and three months later she suddenly found that she was blind with this eye. Her family history threw no light on the case.

On admission, she was a healthy-looking girl, with fresh complexion, and complained of pain in the right eyeball, which was totally blind; occasional dimness of vision in the left eye; severe headache, and a slightly painful swelling over the right parotid gland. The affected eyeball was tense and full, but not decidedly prominent; the conjunctiva was injected and œdematous, but gave no purulent discharge. The pupil was fixed and elongated transversely in an inward direction. The lens appeared quite transparent. The fundus was of a light-yellow colour, but on close inspection the vitreous chamber could be seen to be occupied by what was apparently a new growth, over which no retinal vessels ramified. The general appearance of the organ, with distorted pupil and opacity behind the lens, the youth of the patient, and the exemption of the other eye from ascertainable disease, rendered the diagnosis at once clear and complete. The case was one of glioma of the retina, or, what is clinically the same thing, non-pigmented sarcoma of the choroid.

On July 3rd Mr. Walton extirpated the eyeball, dividing the optic nerve one eighth of an inch beyond the sclerotic. The patient made a good recovery; the œdema of the orbital tissues slowly subsided, and there were no signs of recurrence.

The swelling over the parotid gland having increased after the enucleation, and being elastic but non-fluctuating and without evident inflammatory character, Mr. Walton deemed it advisable to excise it, and this was done on July 18th by a transverse incision. The tumour was unconnected with the parotid itself, but was probably in the lymphatic gland over it. A small salivary fistula remained, but no facial paralysis ensued. Subsequently several glands beneath the jaw, on both sides, but mainly the left, enlarged, but these gradually diminished in size under tonic treatment. There were no other symptoms of lesions commonly ascribed to a strumous diathesis.

Microscopical examination.—On making a transverse section, and looking at the cut surface, the whole of the posterior segment of the eyeball was seen to be occupied by a soft, semi-translucent, grayish-yellow mass, which in several places had become opaque from fatty degeneration, but contained no apoplectic spots. No trace of retinal structures could be found, and the choroid was only represented by a black, broken line, one-tenth of an inch from the sclerotic. The lens capsule was entire, and the lens itself transparent, but its outer part was almost diffluent, the iris pressing forwards and inwards. The optic nerve appeared healthy.

The lymphatic tumour was of very much the same naked-eye appearance as the ocular tumour as to colour &c.

Under the microscope, the mass occupying the eyeball turned out to be a well-marked specimen of glioma, being composed of small round cells imbedded in intercellular substance, partly homogeneous, partly fibrillated. The optic nerve was intact. The semi-fluid part of the lens consisted of fibres with no change in outline. The parotid swelling differed but little from a normal gland (lymphatic), save that here and there were foci of softening and infiltration with inflammatory exudation. As may be imagined, it resembled in microscopical characters the tumour of the globe in no small degree.

Remarks.—This case is of interest from the age of the patient (seventeen years), inasmuch as glioma of the retina and unpigmented choroidal sarcoma usually occur at an earlier age. At one time the enlargement over the parotid raised the question as to whether both diseased conditions were not of the same nature, the latter standing as sequent and consequent, or both arising from a common cause; and despite the teaching of experience that secondary glandular disease rarely occurs in sarcomatous growths, it was thought prudent to interfere. What little aid was given by the naked eye and microscopical search has been detailed, but here, as so frequently happens in medicine, the "progress of the case" cleared up all doubts, seeing that afterwards several glands in turn became enlarged, and subsequently subsided. The ocular tumour and the lymphatic swelling were only coincidental.

N.B. The pain in the left eye and the headache ceased.

NEWCASTLE-UPON-TYNE INFIRMARY.

PYELITIS CAUSED BY A CALCULUS IN THE URETER, AND ASSOCIATED WITH PERINEPHRITIC ABSCESS; REMARKS.

(Under the care of Dr. PHILIPSON.)

A HOUSE-PAINTER, aged forty-six, was admitted August 1st, 1878. He stated that he had been ill for three months, and that for two months he had suffered from pain in the abdomen, more especially in the left side, and round the back. The pain was relieved by vomiting. The bowels were much constipated. The blue line on the gums was well marked. He was frequently troubled with cramps in the legs and arms. The urine was small in quantity, of sp. gr. 1010, neutral in reaction, and was free from albumen.

The symptoms were regarded as due to the effect of lead in the system, and he was prescribed the sulphate of magnesia, with the diluted sulphuric acid, three times each

day. This treatment was continued to August 17th, with the effect of rendering the bowels free, and of mitigating the pain in the abdomen. The iodide of potassium, in doses of ten grains three times each day, was commenced.

From time to time he complained greatly of the pain in the left loin, and said it was burning and grinding in character, and that some nights he was unable to sleep in consequence of its severity. Relief was obtained from the subcutaneous injection of morphia and the application of the belladonna and chloroform liniment.

On September 21st, after a careful examination, a hardness was detected between the crest of the left ilium and the lowest rib, which was regarded as due to perinephritis. Warm anodyne fomentations were ordered.

25th.—Has suffered from repeated retching, and has been unable to take food. Has emaciated considerably. Towards evening hectic flushings occur. Has not had any rigors. The tenderness and fulness in the left loin have increased. Fluctuation has not been detected. There is no expansion in front to justify the supposition of renal tumour. The urine has continued free from albumen. Under the microscope neither blood, pus, nor epithelium from the pelvis of the kidneys has been recognised.

The irritation and pain continued, and he died exhausted on Oct. 4th.

Necropsy, twenty-three hours after death.—The body was much emaciated. On opening the abdomen, the liver was seen to project considerably below the ribs, both the right and the left lobes being considerably enlarged. It weighed 5¼ lb., and was paler than natural, the capsule being firm and tense. On section, the surface was smooth, and was deeply stained by a strong solution of iodine. The spleen was firmly adherent posteriorly, weighed four ounces, and was normal in appearance. The peritoneum was natural. The left kidney was firmly adherent to all the surrounding structures. The whole of the kidney substance was destroyed, its place being taken by thick pus; the capsule was thickened and was adherent to the neighbouring tissue, which was cartilaginous in consistence. Between the exterior of the left kidney and the lumbar muscles was a large collection of pus. The pelvis of the left kidney contained a calculus, measuring fully one inch in length and half an inch in breadth. It was curved at one extremity. The calculus was firmly fixed in the ureter. The calculus was smooth on the surface, and friable, and was composed of phosphates. The bladder was firmly contracted; its walls were thickened, and its internal surface was somewhat congested. The bladder contained no calculus. The right kidney weighed five ounces; externally it was slightly irregular; its surface was abnormally pale, and it was slightly waxy, the Malpighian bodies being stained with iodine. The right ureter was healthy. The stomach was congested; its mucous surface was stained with bile. The intestines were healthy. The heart weighed ten ounces; its cavities were filled with clots; its valves were healthy. The right lung weighed twenty ounces, the left fourteen ounces; both were healthy. The brain weighed 2 lb. 7½ oz.; externally it was normal, as also internally.

Remarks by Dr. PHILIPSON.—The interest of this case is the association of the pyelitis with the perinephritis, the ill-defined symptoms and indications of these conditions and of calculus in the kidney, and the extent of the kidney lesion, as revealed by the necropsy.

The symptoms of pyelitis are, in part, those produced by the morbid state exciting it, especially those denoting a calculus lodged in the kidney, or arrested in its transit towards the bladder; partly those directly traceable to the inflammation of the pelvis and the infundibula. The manifestations of the latter disorder are constant pain in the loin, felt also in the course of the ureter, and the passage of pus and occcasionally of blood in the urine. With the exception of the pain in the left loin, all the distinctive symptoms were absent. The absence, however, of albumen, pus, or blood in the urine is explained by the condition found after death—namely, the obstruction of the left ureter by the calculus.

The history of the case, more especially the occupation of the man, that of a house painter, the presence of the blue line on the gums, and the abdominal location of the pain, pointed to lead impregnation as the cause of the symptoms; hence the treatment that was adopted.

The supervention of slow inflammation in the tissues surrounding the left kidney was correctly diagnosed, but there was uncertainty as to its passage into suppuration, on account of the absence of any rigor and of deep fluctuation. The character of the calculus is of interest—namely, that it was composed of phosphates; for, from recorded cases, stones in the kidney are most frequently composed of uric acid, more rarely of oxalate of lime, and still less often of phosphates.

The right kidney was enlarged, and was comparatively sound in structure. It exemplified that kind of compensation when, of double organs, one has been rendered incapable of its natural functions, and the other has taken up its duty and has performed a twofold amount of work.

The commencing waxy condition of the right kidney, and the more advanced state of the liver, are explicable from the prolongation of the illness, and the association of this with the protracted irritation and hectic fever, such a general condition being regarded as the cause of this structural state.

CASHEL UNION HOSPITAL.

OVARIOTOMY.—THORACENTESIS.

(Under the care of Dr. LAFFAN.)

Ovariotomy; sudden death.—J. K——, a farmer's daughter, aged twenty years, was admitted May 6th, 1878, for ovarian tumour. From the history it appeared that the disease had been first noticed three years and a half previously. From patient's account, the tumour would seem to have been the seat of violent inflammation. There was some evidence also of the chest having been attacked. There was a good deal of confusion in the girl's statements, and it was not easy to obtain conclusive evidence on these two points. She had worked very hard on a spare diet, and ascribed her illness to cold.

On June 1st ovariotomy was performed under thymol spray, and after bichloride of methylene had been administered. The cyst was found universally adherent. About two gallons and a half of clarety fluid were withdrawn by cannula. The adhesions were very strong and were torn through with some difficulty. There was a good deal of bleeding. This necessitated the tying of some vessels. The ligatures were cut short and returned into the abdomen, and the pedicle secured by a clamp. The operation was prolonged, extending over an hour and a half, as time was allowed for the cessation of all draining of blood before the closing of the wound. The patient was very comfortable during the remainder of that day. She recovered rapidly from the effects of the shock. She retained such small quantities of drink as she was allowed, and slept that night with the aid of a little morphia. Next day her condition was still better. She vomited once, however. At 6 P.M. she complained of a great "roasting" in the neighbourhood of the wound. This continued during the evening. She dozed off and on from that time, and fell into a regular sleep at 11 o'clock. Soon after this the nurse noticed her to become pale; after a little she started up from her sleep in a fright; complained of the "roasting," then wandered, threw her hands wildly about her, attempted to get out of bed, sighed, and after a little while expired.

No necropsy was made, but death probably occurred from hæmorrhage, which was too sudden to permit of any attempt to check it by opening the abdomen.

Thoracentesis.—M. D——, a labourer's wife, was admitted on March 26th, 1878. The right pleura was distended with fluid. There was effusion also in the left pleural cavity for three fingers in breadth at the base. General bronchitis coexisted, and her condition was extremely grave. The respirations were 60 in the minute; the pulse was 120. She had pain in the side, and was obliged to lie on her back. The disease had lasted a fortnight, and she had come a long journey, and was much fatigued in consequence. Removal of fluid was decided on. She was constantly watched, so that the operation might be performed at a moment's notice if any further change set in. Meantime digitalis, squill, and mercury were given every second hour. Under the influence of rest and of the above treatment, the rate of respiration fell to 48, but the quantity of fluid and all other symptoms remained as before. The case being one in which life was in imminent danger from asphyxia or syncope, a No. 1 needle of Dieulafoy's aspirator was inserted in the sixth interspace, near the angle of the right scapula, on the 28th of March. No fluid came away, and a No. 3 needle was inserted. Fifty-six ounces of clear serous fluid now came away. All the distressing dyspnœa at once dis-

appeared; the patient was made quite comfortable. The respiration fell to 36, and the pulse to 100. She slept that night, and lay on either side indifferently. The right chest-wall, which before the operation was three inches larger than the left one, at once fell to normal girth, and respiration was re-established, though very feebly in parts, over the entire right side. The dyspnœa never returned, and the patient from this day forward presented no outward appearance of danger. The temperature, however, attained a remarkable height, mounting up to 104°, and even 105·8°, and this it maintained, with some slight variations, for twelve days. After that it fell to 100°, and thence gradually to the normal standard. Fresh fluid was subsequently effused, but the quantity was trifling. Gradually respiration became re-established, the percussion-note became clearer, and the general condition improved. She left hospital in August. The pulse and respiration were a little above normal. The right lung was natural on percussion in front; the lower part of the right side behind presented a modified dulness, while the upper half of the same side exhibited a more modified tonelessness. The respiration was natural over the entire chest in front, but feeble over the right side behind. A process of contraction of the right side had gone on the whole time, and this now left this side an inch and a half smaller than the corresponding one.

It is highly probable that the woman's life was saved by the operation. The subsequent tediousness of the case, and, above, all the contraction of the side, offer some discrepancies to the views of Trousseau, who held out the opposite results as one argument in favour of thoracentesis.

HÔPITAL DE LA PITIÉ, PARIS.

FRACTURE OF THE SKULL; DEATH; SUGAR AND ALBUMEN IN URINE; SUBMENINGEAL HÆMORRHAGE; HÆMORRHAGE INTO THE BULB AND INTO THE PROTUBERANCE.

(Under the care of Professor VERNEUIL.)

THE following case, the notes of which were taken by Mons. Paul Redard, house-surgeon, is interesting from more than one point of view: first, as a corroboration of certain opinions advanced by M. Duret in a recent work; and, secondly, from the rapidity with which death occurred.

X., thirty-five years of age, mason, fell off the top of a ladder at the height of a second-floor window. He was a powerfully built man, and, as it was ascertained from his relatives, had never been ill previously. It was impossible to learn how the fall had taken place, and what portion of the head had struck the ground. He was immediately picked up after the accident, placed upon a litter, and carried to the hospital. A few minutes after the fall breathing stopped, and when he reached the wards of Professor Verneuil he had already expired. Three hours after death rigor mortis was hardly perceptible. There did not appear to be any fracture of the limbs, of the thorax, or of the vertebral column. There was no subconjunctival hæmorrhage, nor was there any trickling of blood or serosity by the ears. There were traces of hæmorrhage by the nasal fossæ. There was no wound of the scalp; the left temporal region, however, was tumefied, and presented a purple colouring. With the help of the catheter, a small quantity of urine was drawn off. By means of heat and nitric acid an albuminous precipitate was deposited, and by the admixture of some of Fehling's solution a large quantity of sugar was shown to exist. The result of the examination of the urine gave rise to the suspicion of the possibility of the existence of a fracture of the skull with concussion of the bulb.

Necropsy, twenty-four hours after death.—Rigor mortis well marked. After the incision of the pericranium, a collection of blood was found in the left temporal fossa. The temporal muscle was triturated and converted into a black pulpy substance. There was a fissure in the bone of the left temporal fossa, extending upwards towards the frontal bone. When the superior portion of the skull was uplifted, a slight collection of blood was found under the dura mater at the point corresponding to the left temporal bone. At the point corresponding to the fissure, which was probably where the shock had been sustained, the pia mater was dotted with traces of hæmorrhage. On the right side there was hæmorrhage under the pia mater, occupying almost all the surface of the hemisphere, with slight hæmorrhagic points. At the base was submeningeal hæmorrhage, chiefly situated at the bulb and at the protuberance. Upon section there was no trace of hæmorrhage in the lateral ventricles or in the third ventricle. Slight dotted hæmorrhage was found in the protuberance, and a small hæmorrhagic focus about the size of a pea on the floor of the fourth ventricle, and on each side of the median line two other foci. The hæmorrhagic focus on the right side was about the size of a small pea, and seemed to correspond to the point which is described as containing the origins of the pneumogastric nerves. On the left side the extravasation of blood was situated about three centimetres from the median line. There were no traces of hæmorrhage in the cerebellum nor in the superior portion of the medulla. The right lung was markedly congested with dark blood. There was subpleural hæmorrhage of about twelve centimetres in length, about the middle of the right lung. In the pleura was some black blood coagulated. The left lung was less coagulated. There was subpericardic hæmorrhage on the anterior face of the heart. The heart otherwise was healthy. Liver slightly congested. The kidneys were tolerably congested, especially the right one.

Remarks.—This case showed us hæmorrhagic lesions of the meningeal membranes at the base and on the hemispheres at the point where the shock took effect, and at the point diametrically opposite to it, as mentioned by M. Duret, after concussions, and which are probably determined by the shock of the cephalo-rachidien fluid. It showed also lesions of the fourth ventricle, thus explaining the reason of the rapid death; as also the presence of albumen and sugar in the urine, and the congestion and hæmorrhage in the different viscera. The lesions of the fourth ventricle are determined by the sudden impulsion given to the cephalo-rachidien fluid, as M. Duret has shown.

M. Redard has already twice observed the presence of sugar and albumen in the urine of patients with fracture of the skull. This case of surgical injury might be compared to those of medical shock (cerebral hæmorrhage) where glycosuria and albuminuria are found temporarily accompanied by visceral congestions. M. Redard, while *interne* in the service of M. Ollivier, saw many cases of cerebral hæmorrhage where glycosuria and albuminuria had existed during life, associated with congested viscera.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Thyrotomy for Removal of Membrane Occluding Larynx.—Tracheotomy in Membranous Laryngitis.

THE ordinary meeting of this Society was held on the 26th inst., Dr. Charles West, President, in the chair. Two papers were read, one recounting the details of a case of thyrotomy for the removal of a cicatricial membrane obliterating the larynx, by Dr. Sémon, and the other dealing generally with the subject of tracheotomy in membranous laryngitis, by Mr. R. W. Parker, a paper which gave rise to an extended discussion, the meeting being prolonged for the purpose. Mr. Parker especially urged careful local treatment of the larynx and trachea during and after the operation.

The first paper read was that on a case of Thyrotomy for the Removal of a Membrane completely Obliterating the Larynx, by Dr. FELIX SÉMON. The patient had attempted to cut his throat, and as the wound healed, it was found necessary to perform tracheotomy. The voice gradually became diminished, and laryngoscopically a tough dense membrane was found occluding the larynx between the false vocal cords, with evidence of anchylosis of the left arytenoid cartilage. The operation was undertaken to remove this membrane, and was the third case on record in which thyrotomy had been practised for such a purpose. A modification of Trendlenberg's tampon was employed to plug the trachea. The author urged great caution in the administration of chloroform through the tampon-cannula, the liability to asphyxia being greater than when inhaled in the ordinary

way. In the operation itself he had intended to only partially divide the thyroid cartilage, leaving its upper part uninjured, so as to ensure subsequent apposition of the parts, but he was compelled to fully divide it. He then found that there was a second membrane in the larynx, at the level of the original suicidal wound, that visible with the laryngoscope being probably due to the adhesion of the false vocal cords. He urged, therefore, in similar cases, an examination through the tracheotomy wound, to ascertain the presence of other membranes. The lower and primary membrane was being excised with a pair of curved scissors, when the patient began to cough violently. It was thought that the tampon-cannula did not sufficiently occlude the larynx, and that perhaps blood had entered the bronchi. In reinflating the tampon the cough was replaced by an intense asthmatic paroxysm marked by extreme inspiratory dyspnœa. No obstruction was found in the tube, but on partial evacuation of the tampon-bag, the dyspnœa ceased, showing, the author held, that an excess even of equal pressure on the inner walls of the trachea sufficed to produce reflex spasm. The sudden cough was in corroboration of Stoerck's statement that the posterior wall of the larynx, and especially the interarytenoid fold, excite cough when touched, whilst the anterior and lateral walls of the larynx are not so irritable. The wound healed by primary union, but in spite of daily repeated and long-continued passage of bougies through the mouth, there was gradual cicatricial stenosis of the larynx, and a month after the operation no air passed through the mouth.—The PRESIDENT complimented Dr. Sémon upon the interest of his paper, on account of its novelty, and the candour and lucidity with which it was written.—Dr. ANDREW suggested that the asthmatical attack which occurred during the operation, characterised especially by marked inspiratory dyspnœa, was due to narrowing of the trachea just below the point where it was unduly distended by the bag of the tampon.—Dr. SÉMON felt sure there was no narrowing of the trachea, for he was able to explore it thoroughly with a goose-quill, and although the dyspnœa was both expiratory and inspiratory, it was chiefly the latter; but he believed it produced by reflex action from pressure on the nerves supplying the mucous membrane, and thought this borne out by some experiments which had been made.—Mr. M. BAKER suggested that the elastic bag of the tampon may have been pressed down, and caused obstruction. Narrowing sufficient to produce dyspnœa would not be proved by a quill.—Mr. HOLMES had had but small experience in thyrotomy, but he had seen no need to employ sutures, and criticised the procedure suggested by Dr. Sémon, of not completing the division of the cartilage, as diminishing the area for manipulation, and preventing the complete exposure of the ventricular bands.—Dr. SÉMON explained that one object he had in view was to preserve the anterior commissure of the vocal cords, and thus prevent that total loss of voice which Bruns had shown to follow after complete thyrotomy.

A paper was then read on Tracheotomy in Membranous Laryngitis, the indications for its adoption, and some special points as regards its after-treatment, by Mr. ROBERT WILLIAM PARKER. The author began by expressing his regret that the surgeon is only too often called in after all therapeutic measures have failed, the more so, because these measures generally include the use of depressants, which if not at once beneficial greatly tend by their continued administration to increase the prostration, so often a predominant feature of the disease. He regards recession of the chest-wall as a more important indication for tracheotomy than a loud clanging cough, for in the most urgent cases voice and cough are all but abolished owing to implication of the vocal cords. He advocates the administration of chloroform previous to the operation, and has never seen any ill effects therefrom. The higher operation is preferred as the more easy, especially in children, and the use of a tracheal dilator is advocated in preference to the immediate introduction of the cannula; in this manner the tracheal wound is kept open. Then the author advises, *as a matter of routine in every case*, that the trachea and glottis be thoroughly cleared of all foreign matters, whether membrane or mucus, before the introduction of the tube. For this purpose a feather is usually employed, but any other means may be adopted which the operator may prefer. The feather may be passed downwards towards the trachea and upwards into the larynx, and through the glottis. The presence, it was argued, of membrane or inspissated mucus in the larynx above the tube after tracheotomy, is often an unsuspected cause of reflex irritation and cough; the surgeon, therefore, ought every now and then to clear out the larynx, so long as the patient is unable to do this for himself; and while he has to wear the cannula in his trachea the patient is unable to use the natural means — viz., coughing — owing to the fact that all air is directed from the larynx through the tube. The author advocates the use of the largest-sized tube which can be got into the trachea without the employment of actual violence, and of the shortest that is consistent with safety, and he lays stress on the advantages of the tracheal part of the tube being freely movable. As regards the curve of the tube, it was stated that the outline should approximate to the Gothic rather than to the Roman arch; in other words, tubes made in the form of quarter circles (the usual forms are not recommended, for it can be shown that such tubes must almost necessarily impinge on the anterior wall of the trachea, and so produce mischief). He believes that a large proportion of the troubles which in past years have arisen from the use of "rigid" tubes has been caused by "ill-fitting" tubes. Speaking of Mr. Baker's "flexible tubes," the author is rather inclined to doubt the expediency of regarding "flexible" tubes as less likely to produce ulceration than "rigid" ones; for, unless the flexible tubes are made of a suitable curve, they will most probably lead to ulceration, just as certainly as (though, perhaps, less rapidly than) rigid tubes. The great indication for operation having been the presence of a mechanical impediment to respiration, so the chief object of the surgeon in the after-treatment must be to prevent its recurrence. The use of a feather has already been referred to. Another important aid is the employment of steam; the amount varies with the individual case, but an excess is in all cases to be avoided.[1] The less there is of tracheal secretion the more is steam needed, and the converse. Creasote, carbolic acid, benzoin, and other medicaments may be added in order to meet the requirements of various cases. The use of "solvents" is strongly recommended, the most important of these being soda. It may be used in solution (from ten to twenty grains in an ounce of water), and ought to be sprayed into the throat from time to time. It is thought to soften the membrane and to help its removal, and also to render its re-formation less possible. The author has seldom seen cases in which a fatal result could be traced to the operation itself; pneumonia and collapse being the commonest causes of death. The paper concludes thus: Bearing in mind that the operation is undertaken, not as a curative measure, but simply with a view to relieve a mechanical impediment to respiration; seeing, nevertheless, the great frequency with which, after tracheotomy, the trachea and larynx, on the post-mortem table, are found covered, not to say choked up, with membranous exudation (specimens of which may be found in almost every anatomical museum),—the author, as a practical outcome of his paper, and with a view to raise a definite issue for discussion, feels justified in enunciating the following dictum: The presence of membrane in the trachea, in a fatal case of membranous laryngitis after tracheotomy, must be regarded as evidence of the want of due care on the part of the surgeon in charge, just as much as would the presence of a piece of gut in the inguinal canal after herniotomy, or a calculus in the bladder after the operation of lithotomy.—Dr. SEMPLE asked the author how many cases were under his own observation, and what was the rate of mortality in them? In how many was there evidence of actual membranous exudation? This was important, for Mr. Smith had told him that he had lost all his cases but one.—Mr. MORRANT BAKER agreed with Mr. Parker that, perhaps, one who introduces a new instrument may be prejudiced in its favour, but he assured him that he would be the first to discard the use of flexible tubes if they were shown to have no advantages over the rigid tubes. The objections raised to them in the paper were similar to those urged before they had been tried, and it was probable that Mr. Parker spoke without having used them. Since their introduction he believed many surgeons, not only in England, but also in Switzerland and in America, had employed them, and he would appeal to their experience as to their utility.—Mr. T. SMITH said Dr. Semple's questions were pertinent, for the whole gist of the paper consisted in the advocacy of

[1] The most useful apparatus for this purpose is the ventilating croup-kettle manufactured by Messrs. Allen and Son, of Marylebone-lane. It supplies not only steam, but fresh and warmed air at the same time.

the methodical treatment of the trachea and the complete extraction of membrane. It was true that he had only one case of recovery after tracheotomy in diphtheria—i.e., in cases marked by albuminuria and other evidence of general blood-poisoning; but this statement did not include all cases of membranous laryngitis in which he had operated. He thought Mr. Parker had made real progress in the treatment of such cases, for too often it was the practice to let matters take their course as soon as the tube had been introduced, and to relax one's efforts when that was accomplished. He had seen death caused by membrane being thrust down the trachea by the tracheotomy tube. He bore testimony to the energy with which the author, when house-surgeon at the Great Ormond-street Hospital, had carried out the after-treatment of cases which he himself would have deemed hopeless; he had often seen him suck out membrane from the trachea, and employ other measures which, were it not for the success that followed, would have been thought to be hazardous or unjustifiable; and he was sure such cases recovered simply from the measures taken to remove exudation as soon as it formed. He hoped that the author would add an appendix of cases to his paper, showing that his conclusions were justified. — Mr. PARKER said he had prepared an abstract of the cases, but, acting on a suggestion of the President, he had not burdened the paper with them. He would say, however, that whilst house-surgeon at the Great Ormond-street Hospital there were nineteen cases of tracheotomy in all, some performed by Mr. Marsh, and some by himself. Of this number twelve recovered, and the thirteenth was still under treatment.—The PRESIDENT explained that he had advised Mr. Parker not to include details of cases, which would have been difficult to follow, and would have unnecessarily lengthened the paper; but a summary, such as he had just given, would be useful, and might be appended to the paper.—Mr. NAPIER was surprised to hear any advocacy of rigid tubes over the flexible forms, and, believing that it was essential to have a tube constructed of non-oxidisable material, and at the same time one which should embody Mr. Baker's principle of flexibility, he had devised a tube made of twisted platinum wire.—Mr. HOLMES said that the author's suggestions were of great value, for he had, he confessed, always abstained as much as possible from irritating the trachea lest its condition be aggravated; but he should now, after Mr. Parker's paper and Mr. Smith's testimony of the value of the practice, alter this procedure, and he hoped with success. Certainly to have a mortality of only six out of nineteen cases—— Mr. PARKER wished to modify this—of tracheotomy in cases of membranous laryngitis he had seen seventeen cases with eight deaths.—Mr. HOLMES, resuming, said that even this was a death-rate wholly unfamiliar to surgeons, and should of itself lead to the general adoption of the lines of practice suggested in the paper. He did not think many surgeons used the flexible tubes, and in one case of tracheotomy for cancer of the larynx, in which the trachea was too sensitive for metal tubes, he had found that the flexible tube caused as much, if not more, irritation, and had to be discarded. For some time in this case he was obliged to have recourse to daily dilatation of the tracheal wound, but at length found that a metal tube, with rounded ends and a perforation at each side, could be borne. He could not see the necessity for having a tube the calibre of which should be larger than the chink of the glottis, nor did he think the length of the tube was of the importance Mr. Parker conceived it to be.—Mr. MARSH observed that the paper was largely a summary of what had already been done in tracheotomy with the employment of mechanical means to get rid of false membrane. In one case he had relieved dyspnœa, which continued after the tube was introduced, by withdrawing membrane by means of forceps, and similar means had been practised by Bouchut and others. Certainly a proportion of eight or nine recoveries out of seventeen cases was a striking success, and far above that ordinarily attending the operation. He himself had performed tracheotomy in about fifty cases, with only eight recoveries; and the last case he had operated on died suddenly the day after the operation, no doubt from blocking of the air-passages with false membrane. The membrane at first was, no doubt, more firmly adherent than subsequently, when it becomes looser and spontaneously detached. He attributed the pneumonia so often the cause of death in these cases to the sucking down of the exudation into the bronchi. What he had seen of Mr. Baker's tubes had convinced him that they were of great value; children wore them without inconvenience, and, although occasionally there might be difficulties in their reintroduction, yet he would be sorry their use should be deprecated until they had been thoroughly tried.—Dr. ORD said there was one point raised by Mr. Parker of great importance—viz., the desirability of performing the operation early, before the child had been subjected to depressing remedies, and also, he might have added, before it had become exhausted by dyspnœa, and was already suffering from collapse of lung. No doubt one great danger was the supervention of pneumonia from the sucking in of morbid material from the larger bronchi. As to Mr. Baker's tubes, the last case he had seen of membranous croup, where the operation was done early, had been treated by this tube, and with great success. —The PRESIDENT wished to add a few remarks, because the greater part of Mr. Parker's experience had been gained at the Hospital for Sick Children during the time when he (Dr. West) had the happiness of being connected with that institution. He believed he had seen more tracheotomy operations than most surgeons, but he had stood by as a critic, and had probably, therefore, observed points which escaped the individual operator. In the whole course of his practice he never regretted having tracheotomy done; he had often regretted that it had not been sooner performed. Retraction of the soft parts during inspiration was the most trustworthy indication for its performance, and in every case he was accustomed to expose the abdomen and chest, and, according to the degree of this retraction, to draw conclusions as to the expediency or not of having tracheotomy done. Mr. Parker's suggestions as to the operation were sound and wise, and he could bear out what he said about venous bleeding. Then as to the size of the tubes; he had seen evil result from the use of too small tubes, and he recollected hearing Trousseau in one of his clinical lectures illustrate this by instancing the difficulty of inhaling through a small tube as compared with one of larger calibre. He was struck to find that Mr. Parker had not mentioned how Trousseau was accustomed to swab out the trachea, holding it to be of considerable importance; and he also advocated dropping in solutions of carbonate of soda, and even nitrate of silver. He had seen what Mr. Parker described, a cannula push aside false membrane in its introduction, showing the importance of clearing the trachea before the tube was introduced. He believed the tube with a movable collar was the invention of M. Roger, late physician to the Hôpital des Enfants Malades. Then he was sure that the chances of success in treatment were small without the aid of an exceedingly competent nurse. He could confirm the statement of the grave indication of a dry state of tube, and in any case where the inner tube is dry he advised moistening with water or solution of carbonate of soda. He doubted if tracheotomy was to blame for the pneumonia which so often complicated membranous laryngitis. He regretted that he had no longer opportunities of increasing his experience, so that he could speak as to the value of Mr. Baker's tubes, but he could conceive many cases in which they would be very advantageous. There could be no risk of oxidation of the metal tube if it were removed and cleansed as frequently as it ought to be. Dr. West concluded by stating that he was glad to bear testimony to the accuracy of Mr. Parker's statements and the soundness of his conclusions.—Mr. PARKER, in reply, said he did not wish to depreciate the value of the flexible tubes, but he would urge that they should be tried on their own merits, and that the evils of ill-fitting rigid tubes should not be taken as evidence in favour of the elastic tube, the curve of which, he believed, could not be altered in the trachea without causing pressure and ulceration. He would rather compare the two kinds of tube to flexible and silver catheters, each useful in its own way. As to the calibre of a tube, it was certainly more difficult to breathe through a long tube than through a short one of the same size. In reply to Mr. Marsh, he said the paper was certainly a summary of the subject, but he did not know of any text-book where the treatment of the trachea as here laid down was emphasised. In answer to Dr. West, he said the necessity for curtailing the paper alone prevented him from referring to the practice of Trousseau and other earlier workers in tracheotomy. He expressed his special obligations to Mr. Marsh for much help in some of his earlier cases; and he was particularly glad that he was enabled to bring the subject before the Society during the presidency of Dr. West, under whose care and supervision he had first done the operation.

CLINICAL SOCIETY OF LONDON.

Excision of Portion of Tarsus for Talipes Varus.—Iodide of Potassium Eruption.—Case of Discharge of Watery Fluid from one Nostril.—Tapping of Pulmonary Cavities.

THE ordinary meeting of this Society was held on the 22nd inst.; Dr. E. H. Greenhow, Hon. Treasurer, in the chair. After Mr. Bryant had shown a patient upon whom he had excised a portion of the tarsus for the relief of talipes varus, and a well-marked and severe case of eruption from iodide of potassium had been exhibited by Dr. Duckworth, Sir James Paget read notes of a case of watery discharge from one nostril. The case was wholly peculiar, and Sir James could not speak positively as to the source of the fluid, which resembled cerebro-spinal fluid in its characters. A paper, read by Dr. Theodore Williams, on a case of attempted tapping of a cavity in the lung, led to an interesting discussion upon the feasibility of this operation.

Mr. BRYANT exhibited a patient who had been the subject of Talipes Varus, and had been treated by the removal of a wedge of bone from the tarsus. The case was that of a boy twelve years of age, who had been under surgical treatment for the condition from infancy. When five years of age tenotomy had been performed with some success, but as the Scarpa's shoe had caused pain, it was laid aside, and the deformity returned. On admission into Guy's Hospital the muscles of the leg were wasted, and the patient walked on the outside of the foot, upon which had formed two large bursæ. Mr. Bryant removed a wedge-shaped piece of bone from the tarsus, as performed by Mr. Davies-Colley in October, 1875. An incision was made across the dorsum of the foot from a point corresponding to the tubercle of the scaphoid to the outer border of the cuboid, and a second incision along the outer border of the foot, the two incisions forming a ⊣ shape. The flaps were then turned back, and the tendons of the extensors divided. A spatula was introduced around the scaphoid bone towards the sole of the foot to protect the soft parts, and the lower section of the wedge of bone cut with a keyhole saw, one line of section extending across the dorsum of the foot from the scaphoid to the anterior border of the cuboid, the second bone section being made higher up; and a wedge, with its apex corresponding to the scaphoid bone, and its base to the cuboid, one inch long, was thus cut away. After the operation the anterior half of the foot was readily brought round into position, and horsehair drainage was employed. The temperature rose to 102°, but on the third day was down to 99·7°, with a pulse of 80. A small quantity of pus was evacuated by a puncture made into the skin, in a position corresponding to the apex of the wedge; in other respects the wound healed rapidly. The boy now presents a foot of good form with a flat sole, on which he walks with comfort. The foot was somewhat shortened after the operation. The tendo Achillis had been cut, with the object of bringing down the heel, but with little result. Mr. Bryant said that ablation of the cuboid had been suggested by Dr. Little in 1854, and practised by Solly in 1857, upon which the operation now under consideration was a great improvement. He considered it also much better than Mr. Lund's operation for the removal of the astragalus, which was performed in 1872, but which he thought might be useful where the equinus was worse than the varus.—Mr. DAVY congratulated Mr. Bryant on the result of his case. He believed that he himself had operated in a similar way more frequently than any other surgeon. There was a class of confirmed and intractable cases of talipes that resisted all methods of treatment. In 1874 he revived Mr. Solly's operation—viz., removal of the cuboid, which had been described by that surgeon twenty years previously, and had fallen into oblivion, and had even been condemned. He did this in five cases with encouraging but not perfect results, proceeding on strictly experimental methods, and not feeling justified in interfering with the astragalo-scaphoid joint, until he had proved that division of the calcaneo-cuboid was insufficient. In April, 1876, he published his experience, and in October of that year Mr. Davies-Colley anticipated him in his paper read before the Medico-Chirurgical Society by performing the milder operation, which Mr. Davy had now performed several times. He showed the casts of his ninth patient, taken before and after the operation, and the result was very satisfactory. No doubt, the operation was on its trial, and was opposed by many surgeons, but he was content to abide by the results, and was glad to see Mr. Bryant commending it so strongly. Patients, after the operation, became absolutely plantigrade; the scar was small and well out of the line of pressure; there was no possibility of relapse, and a symmetrical foot took the place of an unsightly and useless member.

Dr. DYCE DUCKWORTH exhibited a patient suffering from a well-marked Eruption produced by Iodide of Potassium, the case being that of a man thirty-two years of age, who was formerly intemperate, had suffered from rheumatic fever four years previously, and was the subject of aortic valvular disease and chronic tubul nephritis, with some dropsy of the legs. On November 8th a mixture was prescribed for him, containing some ammonio-citrate of iron, and two grains per dose of iodide of potassium three times a day. On the 20th inst. an eruption appeared upon the face, and on the 22nd the patient came under notice. He was found to be suffering from coryza and general bronchial catarrh, with hoarseness. The eruption was situated almost exclusively on the face and ears. Some portions were found on the back of the neck, and a few scattered spots upon the backs of the hands. The bulk of it was upon the left cheek, although it was fairly symmetrical. On the forehead were numerous hard papules becoming vesicular, not umbilicated; on the cheeks the highest point of vesiculation was reached, and here numerous coherent and confluent masses were seen, bordered by red areolæ. In many the fluid was puriform. There was no mass that could properly be called a bulla, and the eruption more resembled patches of herpes in some parts than acne; and some of the vesicles occurred on a piece of white scar-tissue on the forehead, where probably no sebaceous structures remained. There was no rash on the body. Some of the vesicles were found on the lips; none manifest on the tongue. The points of particular interest were—first, its occurrence as the result of small doses of the drug. It appeared that some months previously, in another hospital, a similar eruption had shown itself after some medicine had been taken, and which passed away on discontinuing it. Secondly, the case was an additional one to certain others noticed by Mr. Baker, Dr. Barlow, &c., in which there was present chronic renal disease. It had been surmised that in such cases defective elimination occurred, and the drug was left longer in contact with the textures of the body than in the instances where the kidneys were healthy. Dr. Duckworth had found in some researches on the elimination of iodide of potassium and other drugs (published in St. Bartholomew's Hospital Reports) that in some cases the iodide does not pass out by these organs. In this instance, iodine was found abundantly in the urine. The contents of some of the vesicles were also examined, but the results were equivocal as to the presence of iodine. However, it was well recognised that both iodide and bromide of potassium rashes occurred in the persons of those whose kidneys were presumably healthy. Even in such instances there might be defective eliminating power. Thirdly, the nature of the eruption did not warrant the term acne being applied to it, and further observation was wanting to prove how far the sebaceous glands were the true seat of the inflammation. Dr. Thin's recent examination of a case (see THE LANCET, Nov. 16th, p. 696), went to prove an immunity of these structures.—Dr. GREENHOW had under his care a patient who, on three consecutive occasions, had suffered from an eruption induced by the iodide. There was no albuminuria in that case.—Dr. GLOVER said that renal disease was not necessary for the production of the rash was shown by the fact that the most marked instances of the eruptions, both of iodide and bromide, were met with in children.—Dr. FARQUHARSON pointed out that the tonic effects of salicylic acid were most readily produced in patients with renal disease. It was curious that, in most cases, these eruptions were evoked by comparatively small doses of the drugs. It was so with bromide of potassium, and so it was with quinine (in one case on record one grain of quinine was followed by a rash). Probably the larger doses were more liable to bring the eliminating organs into play than smaller ones.

Sir JAMES PAGET then read notes of a case of Watery Discharge from one Nostril. The fluid, about two ounces, shown to the Society, had dropped from the left nostril of a

lady aged forty-nine, and Sir James stated that similar fluid has been dropping, with rare intermissions, for eighteen months. The fluid looked like pure water, or like that from the pia mater, or that from an acephalocyst. There was no evidence of general ill-health, or any appearance of any kind of local disease of the nose. The history was nearly as insignificant. In November, 1876, the patient had received a heavy blow over the left frontal sinus, but it seemed to have done no harm at the time. In January, 1877, she had one day of intense headache, but there had been no return of this. In February, 1877, she had a severe mental shock, and in May, 1877, the dropping began. From that time to the present the dropping continued, except for a fortnight in May, 1878, when she had bronchitis and took morphia, and on one occasion when it ceased for a night. A small drop fell or ran down the lip every few seconds, and about four ounces had been collected in an afternoon and evening. The quantity was generally uniform, but was increased by much exertion or by straining. On long standing the fluid deposited a minute quantity of a greyish substance, in which nothing could be found but the chance materials washed off from the surface of the nasal mucous membrane. Dr. Russell, Professor of Chemistry at St. Bartholomew's Hospital, reported the fluid to be slightly alkaline, and to contain proteid matter, probably albumen, chloride of sodium, phosphates, and a slight trace of iron, but no grape sugar. The specific gravity was 1004. Mr. Thomas Taylor had found the specific gravity on another occasion to be 1009 in one specimen and 1010 in a second, when he analysed the fluid for Mr. Lawson, who had previously seen the case. [Mr. Taylor's analysis yielded similar results to that of Dr. Russell.] After suggesting several theories to explain the case, Sir James Paget concluded by expressing his opinion, though speaking with much doubt, that the fluid was derived either from a frontal or ethmoidal sinus, or from the subarachnoid space or the sac of the arachnoid membrane. He brought the case forward in the hope of hearing that similar cases had been observed, and that by collecting and comparing them we might gain some knowledge of their nature.—Mr. BRUDENELL CARTER had met with a case of constant limpid narial discharge in an old gentleman eighty-four years of age, who was the subject of gout. The discharge lasted for several years, and was only temporarily relieved by remedies, such as tannin snuff, &c. In reply to Sir James Paget, Mr. Carter added that the discharge came from both nostrils.—Mr. SPENCER WATSON had met with two cases of chronic nasal catarrh, in which the fluid was perfectly limpid. In one of these it lasted for a year or more, was mostly from one nostril, and was occasionally purulent. It seemed to come from the anterior part, was of a clear limpid character, and flowed more readily when the head was lowered. In another case—that of a man aged eighty-four—the discharge was always from one nostril, and was also more abundant when the head was bent. No remedies checked the secretion, which he thought to be due to chronic catarrh of the antrum.—Mr. LAWSON had had the present case under his care, and was struck with the similarity of the fluid to that flowing from the arachnoid of a boy after trephining. In the present case it was noticeable that very little escaped during sleep, which might be due either to less fluid being then secreted, or else that it dribbled down the pharynx and was swallowed.—Dr. HEWAN had observed a somewhat similar discharge (but he believed of catarrhal nature) from the left nostril of a phthisical young man. It was arrested by hypophosphite of soda, but in six or eight months it recurred, when it was again treated with good results.—Dr. ALTHAUS inquired whether the olfactory sense was deranged. It was possible the discharge depended on some aberration of nerve-influence.—Sir JAMES PAGET, in reply, said that the sense of smell was unimpaired. The cases mentioned were of different nature to this, which did not depend on chronic coryza, or congested mucous membrane. The peculiarity lay in the fact that the discharge had dripped during the whole time from one nostril, in a simple continual stream, and never with any admixture of blood or pus. He must still leave the question of its nature open, whether it were cerebro-spinal fluid, or secretion from the ethmoidal or frontal sinuses. Any similar cases that may be recorded hereafter should contain an accurate statement of the amount and nature of the fluid.

Dr. THEODORE WILLIAMS read notes of a case of Bronchiectasis and Lung Excavation, in which an attempt was made to drain the cavity by tapping. The patient, a man aged twenty-nine, had chronic pneumonia of both lungs, resulting in perfect resolution in one, and in induration and dilation of the bronchi in the other. He subsequently had hæmoptysis to the amount of three pints, and lost two stones in weight. When admitted into the Brompton Hospital in May, 1877, the symptoms were convulsive cough and fetid expectoration, containing large quantities of lung-tissue, and so offensive in character as to cause frequent vomiting. There was also considerable pyrexia. The physical signs denoted consolidation of the base of the left lung, with commencing excavation. During his stay in the hospital the area over which cavernous sounds were audible increased considerably. Various kinds of treatment were tried to relieve the cough and to facilitate and disinfect the expectoration, but all with temporary benefit; and as the patient appeared to be poisoned more and more by the retained expectoration, and exhausted by the cough, on October 16th, 1877, a medium-sized aspirator needle was passed between the eighth and ninth ribs, in the area of the cavernous sounds, and appeared to reach the cavity, but on exhaustion only a few drops of blood followed the operation, and the puncture was consequently closed with lint. The patient afterwards suffered pain in the infra-mammary region, but as his symptoms continued to increase, a fortnight later a second attempt was made to reach the cavern; this time the intercostal space next below the site of the first operation was selected, and a trocar and large drainage-tube were introduced. On reaching the pleura a pint of brownish fetid fluid escaped, which proved under the microscope to consist of broken-down pus-cells. Symptoms of collapse followed the evacuation of the fluid, and the patient was with difficulty rallied with stimulants. The abscess was washed out with disinfectants, but no improvement took place, and the patient gradually sank three days after the operation. On post-mortem examination, it was found that the lung contained a labyrinthine cavity, formed by the breaking down of the walls of several dilated bronchi, one of which had been penetrated by the first operation. Overlying the cavity was a limited empyema, which the second operation had evacuated. The right lung was affected by recent pneumonia, the result of infection through inhaled secretion from the left, this being the immediate cause of death. Dr. Williams remarked that it was often difficult to determine by auscultation the exact size and form of a cavity; especially so when, as in the present instance, it communicated with several dilated bronchi, as reverberation of sound in these winding and irregular passages increased the area of cavernous sound, and gave the impression of a larger extent of cavity than really existed. Another curious feature was the presence of vocal fremitus in spite of the existence of a large quantity of fluid, but this might be attributed to the very tense condition of the pleura from the amount of effusion poured out into a limited space. The failure of the first operation was due, not to any error in aim, for the dilated bronchus was penetrated, but to the nature of the expectoration preventing its passage through the aspirator; and the second operation, with the trocar and cannula, while it tapped the empyema, did not consequently reach the accumulated secretion of the bronchiectasis.—Dr. SYMES THOMPSON, speaking of empyemata secondary to ulceration of lung, approved of this treatment, and instanced two cases recently under his care where free drainage of the pleura entirely relieved the purulent expectoration. He urged specially that the openings should be dependent, and that a counter-opening should always be made.—Mr. BRYANT also urged the great importance of a really free outlet for the pus from the empyema (whether this communicated with lung or not) if any good result were to be hoped for. He discountenanced temporising measures by aspiration.—Dr. GREEN pointed out that the question raised by Dr. Williams was not the treatment of localised empyemata, but the propriety of tapping pulmonary cavities.—Dr. DOUGLAS POWELL said that it was just this question of the feasibility of tapping pulmonary cavities on which they wished to hear the experience of surgeons. Mr. Bryant's remarks did not apply so well to cavities in the lung as to empyemata, for in the former there must necessarily be large vessels met with in the walls of the vomica which would render it less dangerous to use a blunt instrument like a trocar than a knife, for it would bruise rather than cut the tissues. In this case, as it happened, there was an empyema complicating the pulmonary condition, and the aspirator-needle must have traversed the empyema

to pierce the lung. The difficulty in the performance of tapping pulmonary cavities lay in diagnosis from the transmission of the signs of excavation far from their seat of production owing to dense pleural adhesions, and he frequently found this true also with regard to consolidated lung, where auscultatory signs and vocal vibration may from this cause be perceived at a lower level than the seat of disease. Cavities at the base of the lung were eminently suitable for tapping, and it seemed to be waste of time not so to deal with them. But in all these cases, where much pus was expectorated with but little admixture of mucus, an empyema communicating with lung should be suspected.—Dr. CAYLEY said that a few years ago in Berlin several cases of tapping pulmonary cavities were related, and some had also been published in America. But the results were not encouraging. The procedure seemed more likely to be of benefit in basic cavities, which were generally the result of pneumonia, than in apicial vomicæ, which are mostly tubercular. Then the amount of expectoration was not much guide to the size of the cavity, for much came from the surrounding tubes as well as from the cavity itself. If pure pus were expectorated, it would probably come either from a distinct abscess in the lung or from an empyema; and he mentioned a case under his care two years ago where there were physical signs of a cavity and purulent expectoration, which proved to have been due to a circumscribed empyema at the back of the lung.—Mr. B. HILL had two or three years ago opened a pulmonary cavity in a case under the care of Dr. Wilson Fox at University College Hospital. The opening was made in the seventh right interspace, and at least ten ounces of pus escaped, followed by free hæmorrhage, necessitating plugging. Considerable benefit followed, but, after a while, pus was again expectorated, and fresh discharge occurred through the opening in the chest. The patient died from mediastinal cancer, and in the lung was found an abscess in communication with a bronchus, and also with a fistula which had resulted from the abscess first opened.—Mr. MAUNDER said he had more than once suggested that empyemata should be treated on general principles, like abscess elsewhere. A free incision should be made in order to favour a ready flow in accordance with gravitation, and in order that the abscess walls may rapidly coalesce, and heal by granulation. In cases of abscess in the lung, if it could be shown that adhesions existed between the abscess wall and the parietes, there would be no hesitation about opening the abscesses.—Dr. WILLIAMS, in reply, said that he fully concurred as to the advisability of free openings in empyema; but in this case he thought he was dealing only with a cavity in the lung, in which case, if adhesions did not exist, a pneumothorax might be established by the operation. But as in chronic cases adhesions were pretty certain to be found, this risk was removed, and he was satisfied the procedure might be safely adopted in basic cavities.

MEDICAL SOCIETY OF LONDON.

Treatment of Spinal Curvature by the Rigid Jacket.

AT the ordinary meeting of this Society held on the 25th inst., Mr. R. Davy in the chair, the discussion on Mr. Owen's paper on the Use of Rigid Jackets in the Treatment of Diseases of the Spine was resumed by Dr. FISHER, who exhibited Cocking's poro-plastic felt jacket, which can be moulded to the patient's chest, and had the advantages of being easily and rapidly applied, of durability of material, of accuracy in fitting, certainty in becoming rigid, its lightness, and its ready removability for the sake of cleanliness or examination. In these respects it was superior to plaster-of-Paris. Mr. Fisher suspends from the head when possible, but not in the cases of heavy adults or children with cervical caries, and he advised that the suspension should be done slowly and carefully.—Mr. ADAMS spoke of the great economy and efficiency of the poro-plastic jacket. He did not think Dr. Sayre intended to imply that the angle caused by the disease could be straightened by suspension, but only that the compensatory curve could be removed. The patient should wear some support till the age of twenty. Mr. Adams had used gutta-percha supports for more than twenty-five years; and light steel supports had done good service. He believed the poro-plastic jacket would replace plaster-of-Paris.—Mr. GOLDING BIRD spoke from an experience of some fifty or sixty cases, half of which were angular. He preferred plaster-of-Paris to felt, one reason being that, owing to the latter splint being cut up the middle, complete rest is not obtained by it. Mr. Bird adduced several objections that had been raised to suspension, such as the effect on the child, or fainting of an adult; that no case of Pott's disease with cure of the deformity could be shown when the bones had not come together was no argument, since no museum contained specimens of a spine which has been so treated as to prevent the surfaces coming together. As to rudely tearing asunder the spine which is united, Mr. Bird would say, that so long as the patient suffers no pain, no harm can be done. That extension of a diseased part was of some service, he instanced the effect of extension upon a fractured femur which had become bowed. Mr. Bird held that the boss is influenced if the patient be fairly suspended, and showed tracings confirmatory of this. — Dr. DICK said, in some cases, suspension would be dangerous, and he urged certain objections to all kinds of jackets, one being that the abdominal walls gave no *point d'appui*. — Mr. HOWARD MARSH had no doubt the curvature could be straightened out, and he could not see why anchylosis should not take place if the spine were kept straight. He was inclined to prefer the felt jacket to plaster. Dr. Taylor, of New York, insists on the importance of early recognition of these cases, to get the best results from treatment.—Mr. DONALD NAPIER exhibited Maw's apparatus, and asked whether extension might not be made from the lower extremities and the shoulders, the patient lying on an inclined plane. He asked whether the rigid jackets interfered with the respiratory or digestive organs.—Mr. DURHAM praised Dr. Sayre's method as being scientific in principle, based upon the same lines as extension in fracture or in diseased joints, and with a view to give rest to the spine—an end difficult to attain except on the principle of perfect inflexibility. Numbers of children had been suspended at Guy's Hospital, with no harm resulting, and with moderate care and caution suspension did no injury. He pointed out the ease with which Sayre's system can be carried out, the impossibility of treatment by recumbency in the greater number of cases, and, especially in poor practice, the difficulty of getting instruments to fit on the old system. The practice was not only scientific, easy, and economical, but eminently successful; for in no case of genuine spinal disease so treated had he seen any ill-effect, but in all more or less good. The first patient put up by Dr. Sayre himself at Guy's came quite bowed, but is now quite upright, and a strong, healthy child. Each case must be treated on its own merits, for from time to time cases will arise where the application is difficult.—Mr. COLES, speaking from experience with Dr. Sayre in New York, said no harm can be produced provided extension is stopped as soon as pain occurs.—Mr. DAVY remarked that Ambrose Paré, in 1545, had described a plan very similar to that of Sayre, with the exception of suspension, though he had mentioned the necessity of extension. The recumbent position is impossible, either to rich or poor. He had not found plaster-of-Paris applicable to all cases; it was impracticable where there was discharge.—Mr. OWEN having replied, the Society adjourned at a late hour.

PROVINCIAL MEDICAL SOCIETIES.

BRISTOL MEDICO-CHIRURGICAL SOCIETY. — At the last meeting (October 23rd)—Dr. H. Fripp, President, being in the chair—Dr. GREIG SMITH exhibited specimens and drawings from two cases of Sarcomatous Tumours of the Skull. A cast of the head of one of the cases showed the enormous size to which such growths may attain, and the macerated skull of the same case exhibited in a striking manner the rarefaction of bone and stalactitiform growth of osteophytes. From the other case were exhibited the calvaria, and a sarcomatous tumour as large as two closed fists perforating it, also secondary deposits in the sphenoid and frontal bones, several of the vertebræ causing irregular curvature at one point and destruction of the spinal cord at another, in one of the ribs, and in the centre of one of the lobes of the brain. Dr. Smith discussed at some length the

history of giant-cells in such tumours, and in other growths connected with bone. He also gave the results of investigations on osteophyte growth.—Mr. G. EWENS read a paper on a case of Enteric Fever, in which the pyrexia in the primary attack and a relapse were successfully treated with salicylates.—Dr. SPENCER read a paper on a case of Inflammation of the Spinal Dura Mater (pachymeningitis spinalis externa). The patient was a lad of fourteen, admitted to the infirmary in July, 1878. The attack began with pain in the small of the back, knees, and feet, and with diarrhœa, about ten days before admission. The symptoms then closely resembled those of enteric fever. As the case progressed, the chief symptoms were severe pain in the back, gradually extending higher, rigidity of the neck when the pain had reached the upper dorsal and cervical regions, copious sweating, diarrhœa, and delirium. There was no paralysis nor disorders of sensation. Death occurred on the seventh day after admission. On post-mortem examination, the spinal canal, external to the dura mater, was full of pus from top to bottom. The pus had found its way out through the intervertebral foramina and laminæ, and formed collections amongst the muscles of the lumbar region. Opposite the sixth and seventh dorsal vertebræ, on the right side, a collection of pus was found under the costal pleura. The dura was softened and perforated with ragged openings at the lower end. The cord was healthy; the spinal-medulli veins injected. The lower lobe of the right lung was splenified. The pleura here was covered with soft recent lymph, and this again by a large blood-clot. A clot of blood was found in the left occipital fossa at the posterior margin of the foramen magnum. There was universal hyperæmia. No diseased bone, whether of rib or spinal column, could be detected after most careful search. The etiology and literature of the disease were discussed. The case was considered to be an uncomplicated example of the disease, of idiopathic inflammation of the spinal dura mater. No other origin for the disease seemed possible in this case than the joint effect of cold and strain during work. The characteristics of the affection were to be found rather in the absence of symptoms usually associated with inflammation of the pia mater and cord than in the presence of any specially distinctive symptoms. The cord and portions of the spinal column were exhibited.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.—At the meeting of this Society on Nov. 3rd, Dr. W. ALLAN JAMIESON read a paper "On the Histology of Psoriasis." From a series of observations made on psoriasis in various stages, he had come to the same opinion as Dr. A. R. Robinson, of New York, that the disease is primarily a hyperplasia of the rete Malpighii, the initiative being taken by the cells next the corium. Prolongations are pushed down into the corium, the vessels consecutively dilate, white blood-cells are exuded, and the meshwork of the finer portions of the derma becomes opened out and infiltrated with serum and cells. There is no true hypertrophy of the papillæ. It was fully demonstrated that the columnar cells forming the deepest layer of these prolongations rest on a fine basement membrane, which sends up denticulations between them, similar to those described by Eberth in the frog. Nunn's paper in the *Journal of Physiology* "On the Action of Arsenic in Frogs," was quoted, and the bearing the facts related there have on the mode of action of arsenic in psoriasis was shown. Arsenic acts destructively, first on the columnar cells of the rete, and then on the superficial layers, and as the deepest cells of the rete furnish the starting-point in the morbid process in psoriasis, arsenic, by neutralising their over-activity, is the physiological remedy for psoriasis. The paper was illustrated by a series of microscopic preparations, exhibiting the life history of a papule of psoriasis from its commencement to its decline.—Mr. Jos. Bell and the President, Professor Sanders, spoke highly of the paper.—The next paper was "Observations on Knock-knee," by JOHN CHIENE, F.R.C.S. Mr. Chiene removes a wedge-shaped piece immediately above the promontory or inner condyle, downwards and inwards. Rupture seldom takes place into the joint.—Mr. Jos. Bell spoke very highly of Mr. Chiene's operation. He preferred to give a fair trial to mechanical means.—Dr. Ewart spoke highly of the operation as performed by a French surgeon.—Mr. Symmington preferred Dr. McEwen's (of Glasgow) method, in which no bony material is removed.—Dr. Blair Cunynghame suggested that by sawing inwardly above the outer condyle, the wedge-shape would arise with its base externally on straightening the limb by an internal splint, and would leave Nature to fill up the wedge-shaped cavity with its base external, thereby lowering the external condyle.

Reviews and Notices of Books.

A Handbook on the Diagnosis of Skin Diseases. By ROBERT LIVEING, A.M., M.D. Cantab., F.R.C.P. Lond., Lecturer on Dermatology to the Middlesex Hospital Medical School. London: Longmans, Green, and Co. 1878.

THE characteristic feature of this book is its exclusive devotion to the consideration of the symptomatology and differential diagnosis of the chief diseases of the skin. Whether the experiment of preparing a small handbook on the diagnosis of skin diseases, without any reference to treatment, will be successful or not it may not be easy to predict, but of its propriety and desirability there can scarcely be a difference of opinion. Paradoxical as it may appear, it is nevertheless true that the evil of modern medicine, as of medicine of all times, is over-anxiety about treatment. Everything is subordinated to a search after remedies. At first sight this may seem the primary duty of the healing art, but a little reflection will show that this is not so. The basis of practical medicine is Diagnosis; Therapeutics its superstructure. An acquaintance with all the known modes of cure is of little avail where diagnostic faculty is either absent or imperfectly developed. The scanty attention given to the study of diagnosis in medical education, and the eager pursuit of treatment, have done more to retard the progress of medical science than anything else. Worse than this, they have fostered empiricism, egoism, homœopathy, and almost every form of medical charlatanry.

On these grounds alone we should welcome Dr. Liveing's book as a harbinger of a new and better order of things. But the work has special merits of its own. The introductory chapter is devoted to a discussion of the best mode of studying skin diseases, with a view to obtaining an accurate knowledge of their nature and affinities; and the second chapter dwells upon the value of so-called elementary lesions in their bearing on diagnosis. In the remaining chapters the plan of the work is occasionally varied. In some instances the remarks apply almost exclusively to the points of differential diagnosis; in others, especially when the rarer forms of diseases are considered, there is a fuller and more detailed account of their symptoms. At the end of the descriptions of the different diseases the references to the best plates are briefly indicated.

We hope that it is not necessary to explain that it does not follow from our strictures on the abuse of the therapeutical method that we are altogether opposed to the treatment of disease. Nor is Dr. Liveing open to such a condemnation. He has saved his reputation among "practical" men by having already published some excellent "Notes on the *Treatment* of Skin Diseases."

The book now referred to is neatly and compactly bound, and is of a convenient size for the pocket.

The Causes of Origin of Heart Disease and Aneurism in the Army. By WILLIAM E. RIORDAN, Surgeon-Major. Dublin: Fannin and Co. London: Longmans and Co. 1878.

THE main object of this book is to show that the explanations hitherto advanced of the remarkable preponderance of cardiac and arterial disease in the army, as compared with civil life, are insufficient. Mechanical strain alone will not account for the heart disease, and syphilis cannot be invoked to explain all cases of aneurism. Mr. Riordan advances the opinion, which he states most temperately and with considerable cogency, that the causes of cardiac derangements in the army are twofold—viz., drill and

discipline. Not that *per se* either drill or discipline is harmful; but it is the operation of each of these upon the raw recruit, who, on entering the ranks, is suddenly put through a course of life and labour wholly different from that he was previously pursuing. The first six months' drill, with its violent exercises, entailing considerable alterations in the form of the thorax, must, he holds, be attended with considerable disturbance of the conditions under which the circulation is carried on; and when to this are added the effects of mental worry and anxiety entailed by the strict but necessary demands of discipline, he finds here enough to explain functional derangements of the heart, which are subjectively evidenced by palpitation and objectively by hypertrophy. The etiology of aneurism is, Mr. Riordan believes, linked to that of heart disease, as a secondary result of the latter. The remedies for such affections lie, then, wholly in prophylaxis, and he thinks this best carried out by allowing more time for the "setting-up position" drill and early training of the soldier; the discarding of such powerful measures for expanding the chest as dumb-bell exercise and the like; the amelioration of all avoidable causes of mental anxiety, and a more careful attention to the needs of the soldier in his barracks, as well as more changes of clothing for broken weather. Much as military hygiene has been improved, he still thinks that in these directions, at least, there is scope for further improvement.

OUR LIBRARY TABLE.

Brain: a Journal of Neurology. Edited by Drs. J. C. BUCKNILL, J. CRICHTON-BROWNE, D. FERRIER, and J. HUGHLINGS-JACKSON. Part III., October, 1878. London: Macmillan and Co.—Although this part of *Brain* may not contain such an array of well-known names as its two predecessors, it is of more general interest to the practical physician. In it, too, the editors at length break silence by an able paper from Dr. Hughlings-Jackson's pen "On Affections of Speech from Diseases of the Brain." Another novelty is the publication among the original articles of two long but valuable contributions from America: one by Dr. S. Weir Mitchell, of Philadelphia, entitled "Some of the Lessons of Neurotomy"; the other by Dr. Yandell, of Louisville, called "A Study of four hundred and fifteen cases of Tetanus." Among the clinical cases, Dr. Gowers records an instance of congenital absence of the left hand with a small right ascending parietal convolution, this spot corresponding precisely to the area the stimulation of which in monkeys causes, according to the experiments of Ferrier, movements of the opposite hand. Mr. Herbert R. O. Sankey reports two cases of microcephalic idiocy in one family, and gives drawings of the shape of the head.

Philosophical Fragments, written during intervals of Business. By J. D. MORELL, LL.D. Small 8vo, pp. 278. Longmans and Co. 1878.—The appearance of this small work is well-timed. It gives a brief history of the fortunes of the modern school of German philosophy down to the present day; it discusses the theory of human knowledge; and it endeavours to show the application of some of the modern doctrines of psychology to the principles of education. Each of these subjects has its special interest, but the second-named deals with matters which touch the core of the discussions on fundamental points of knowledge which at the present moment are exciting so much attention among educated persons generally. These "fragments" are marked by that sound-mindedness (to use an expression of Whewell's) which is characteristic of Dr. Morell's philosophical writings, and which makes them so pleasant as well as so profitable to the reader.

The Physician's and Surgeon's Visiting List, Diary, Almanack, and Book of Engagements for 1879. London: John Smith and Co., Long-acre.—When an annual of this kind can boast of having reached its thirty-third year, the notice of the journalist is almost superfluous. It is a most compact and comprehensive book for the use of the practitioner. A very useful feature of it is the Pharmacopœia Companion—a Posological table of all the medicines of the Pharmacopœia.

Annotated Poems of English Authors, edited by Rev. E. T. STEVENS, M.A. Oxon., and D. MORRIS, B.A. Lond. "The Task," Book I.; "The Sofa," by WILLIAM COWPER. London: Longmans, Green, and Co.—A useful edition for popular reading, with excellent glossary giving the sense in which many special terms are employed in the text and limiting the use of others.

How can a Sound Knowledge of Music be best and most generally Disseminated? By JOHN HULLAH, LL.D. London: Longmans, Green, and Co.—Mr. Hullah laments that "there are already engaged in teaching in elementary schools the usual subjects at least 10,000 persons—probably many more—increasing annually at the rate of about 1000 a year, who could also teach music, and who now, save in rare cases, do nothing of the kind." The cultivation of music has certainly a moral and mental aspect of considerable moment, and Mr. Hullah's labours in the cause have a patriotic character which entitles his opinion to general respect.

Baths and Bathing. By Dr. JOSEPH FARRAR. Morecambe: J. Jowett. 1878.—This is called "a book for everybody," and it is essentially a popular treatise intended for the guidance of the thousands who once a year go seaward for the purpose of bathing. The advice given seems to us to be fairly sound and good, and we can recommend it as a trustworthy guide.

THE REMAINS OF WILLIAM HARVEY.

BY BENJAMIN W. RICHARDSON, M.D., F.R.S.

MY late beloved and honoured friend, Dr. Robert Willis, of Barnes, in his life of Harvey, describes, after Aubrey, the death and burial of our greatest English anatomist. On the third day of June, 1657, about ten in the morning, Harvey, then in his eightieth year, on attempting to speak, found that he had lost the power of utterance,—that, in the language of the vulgar, he had the dead palsy in his tongue. He did not lose his other faculties, however; but, knowing that his end was approaching, he sent for his nephews, to each of whom he gave some token of remembrance—his watch to one, his signet ring to another, and so on. He further made signs to Sambroke, his apothecary, to bleed him under the tongue; but this did little or no good, and by and by, in the evening of the day in which he was smitten, he died, the palsy giving him an easy passport. The funeral took place a few days afterwards, the body being attended far beyond the walls of the city by a long train of his friends of the College of Physicians, and the remains were finally deposited in a vault at Hempstead, in Essex, which his brother Eliab had built. He was lapt in lead, and on his breast, in great letters, his name, "Dr. William Harvey." "I was at his funeral," continues Aubrey, "and helped to carry him into the vault." This is the brief account of the placing of the remains in the vault of the church at Hempstead, and there they still remain, probably in precisely the same position as they were left by Aubrey and his colleagues two hundred and twenty-one years ago.

Hempstead is a village about seven miles from Saffron Walden, and the best way for those who wish to pay a pilgrimage to it is for them to take the train to Saffron Walden, and from thence by carriage on to Hempstead. They will find no obstacle in the way of seeing the vault and the remains; on the contrary, they will have a willing and intelligent guide in the sexton, Mrs. Ford, who lives close

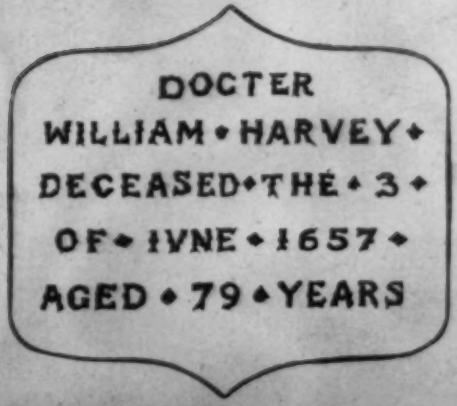
HEMPSTEAD CHURCH FROM THE WESTERN SIDE.

MEMORIAL TABLET AND BUST.

PROFILE OF BUST.

HEMPSTEAD CHURCH FROM THE EASTERN SIDE.

INTERIOR OF VAULT, AND SARCOPHAGUS CONTAINING REMAINS OF HARVEY.



INSCRIPTION ON BREAST-PLATE OF SARCOPHAGUS.
FROM A RUBBING OF THE PLATE.

by, who has the keys of the church and vault, and who will give much very useful and correct information respecting the Harvey chapel, the vault, and the various members of the Harvey family, many of whom, as well as the anatomist, are buried at Hempstead.

In my early life I lived for nearly two years in Saffron Walden, assisting the late Mr. Thomas Brown, surgeon of that place. Some time about Christmas, 1847, I was attending, in her accouchement, the wife of a cottager at a village called Radwinter, near to Hempstead; and, while waiting in the night, I heard from the husband of my patient an interesting story of the chapel and vault of the "great Dr. Harvey." Gradually it dawned on me that the Harvey referred to must be the discoverer of the circulation of the blood. On further inquiry I found this to be the fact. Very soon, as may be expected, I visited the church; and a year or two later, when I became acquainted with Dr. Willis, whom for a time I joined in practice at Mortlake, I reported to him the condition of the remains for a proposed new edition of a life of Harvey, which he had at that time in contemplation, apart from the edition of the Sydenham Society, which he had already prepared and brought out.

As far as I could learn in 1847, the vault containing the remains of Harvey had not then been visited by men of science within the memory of any person in the village of Hempstead, neither had anyone been curious about it. The villagers said they knew Dr. Harvey was a very great man, who had, they had heard, made some great discovery, but they did not know what it was. They held the whole of the Harvey family, however, in much reverence as an old county family of high distinction, with merchants and knights, and even baronets, connected with it. At that time the vault had been long and grievously neglected. The vault was practically open to the public, for the window in it at the eastern end was uncased and badly barred, and the leaden shell in which Harvey lies on the floor was exposed to drift of rain whenever the rain beat in from the east, and was, in fact, altogether unprotected. Boys could throw stones upon the leaden sarcophagus, and did so. Indeed, it is not too much to say that any unscrupulous antiquarian, corrupted to theft by the desire of possession of a great relic, might with the utmost ease have purloined the remains of Harvey, without much fear of detection. At that time there was a small rent almost through the lead, on the upper surface of the shell, in the upper third of its length from the feet. The leaden case was also beginning to bend in over the middle of the body, looking like a large scoop or spoon, in which water could accumulate; but whether at that time water had permeated into the shell I cannot say. I think it had not.

In 1859 a visit to the remains was made by Drs. Stewart and Quain, at the request of the Royal College of Physicians. Their report was very exact and accurate. At the time of their visit the case was probably full of dirty water, which had, I have no doubt, got into it through the crack or opening to which I have referred, which had become enlarged, and which had penetrated quite through the lead.

Some repairs were made in the vault after the visit and report of Drs. Stewart and Quain, and in 1868, when I made another of my pilgrimages to Hempstead, the vault looked comparatively fresh, clean, and dry. The window had been barred; either a new entrance had been made into the vault or the old one had been very much improved; many of the other coffins and leaden cases in it, containing the remains of the members of the Harvey family, had been neatly arranged, and the sarcophagus containing Harvey was both dry and clean. By this time, however, the opening in the sarcophagus had become so large that two or three fingers could easily be introduced into it. Mr. A. Haviland, Dr. L. Sedgwick, Mr. Stear of Saffron Walden, the late Dr. Forbes Winslow, and some other friends, were with me on this occasion, and while I was examining the opening in the case or shell, Winslow holding a lamp I had brought with me, a frog leaped out of the opening. I tried to throw a light, by reflection, through this opening into the case, in order to determine if any part of the body was still in the case, but was unable to arrive at a satisfactory conclusion on the point. There was no water in the case then. At this visit in 1868 I paid more attention than I had previously done to the Harvey chapel within the church. In the wall of the church is a memorial tablet or monument of Harvey himself. In the recess of the monument is a marble bust of Harvey, and on examining the bust I was first led to the conclusion that the sculptor had copied from a cast of the face taken after death.

On July 19th of the present year, in company with my friend Mr. Thomas Woolner, R.A., and my son Bertram, I paid another visit to Hempstead, having with me Mr. F. T. Day, of Saffron Walden, to take photographic views of all that might be of interest and importance in connexion with Harvey. The skill with which Mr. Day has fulfilled his task deserves the highest commendation. He has produced a series of the most beautiful photographs, from five of which Mr. George Evans, with great fidelity and artistic taste, has produced the drawings which accompany this narrative.

In describing from this last visit, I am led naturally from one subject to another by the views themselves. The church, as will be seen from the first sketch, which represents the western end, stands out quite alone, and is on rising ground. It is, I believe, a church of the reign of Henry the Seventh, though some parts are said to be much older. The Harvey Chapel dates from the time of William Harvey, the vault having been built by his brother Eliab. Within the church is what is called the Harvey Chapel. This is situated at the north-east corner of the church, to the left of the altar as you stand before it. The chapel is a handsome little ruin over the vault, and it contains several monuments of the family. It has a window looking to the north, to the left of which are two monuments—one to Admiral Sir Eliab Harvey, who was born on the 5th December, 1758, and died on the 20th February, 1830, and another to Lady Louisa, the wife of the admiral, who died on the 4th December, 1841, at the age of eighty-four. The admiral was the last descendant bearing the name of Harvey. He was the third son of William and Emma Harvey. He died at Roll's Court. The admiral had three sons, all of whom died in his lifetime, and two of whom lie in the vault with him at Hempstead. He left six daughters — namely, Mrs. Lloyd, Mrs. Drummond, Mrs. Bramston, Mrs. Towers, Lady Eustace, and Mrs. Fane.

On the right hand side of the window of the chapel are three monuments. One, nearest the window — a large tablet, — contains the account of Harvey's brother Eliab, the merchant, of the two daughters of Eliab (Sarah and Elizabeth), of his wife (Mary), of his eldest son Sir Eliab Harvey, knight, who died Feb. 20th, 1698, aged sixty-four, of Matthew the son of Sir Eliab, who died in 1692, aged twenty-three years, and of some other members of the family. The next monument from the window on the right records the death of William Harvey of Roehampton, who died on Aug. 13th. 1719, at the age of eighty; and of his wife. On the third monument is recorded the death of William Harvey of Chigwell, and of his wife, parents of the admiral above named.

THE BUST OF HARVEY.

Turning round from the chapel into the aisle of the church, and looking westward, there is, on the right hand, in the wall of the church, and raised so high that the upper part of it is in a line with the spring of the roof of the aisle, a marble tablet or monument containing the bust of William Harvey. The ornamentation of the tablet is bold and effective, and below the bust is the following inscription, which is here literally rendered from a photographic copy:—

GVLIELMVS HARVEIVS
Cui tam colendo Nomini assurgunt omnes Academiæ
Qui diurnum Sanguinis motum Post tot Annorum
Millia Primus inuenit
Orbi Salutem Sibi immortalitatem
Consequutus.
Qui ortum et generationem Animalium Solus omnium
A Pseudophilosophia Liberauit.
Cui debet
Quod sibi innotuit humanum genus Seipsam medicina
Sereniss: *Maiestat: JACOBO* et *CAROLO* Britanniarum Monarchis
Archiatrus. et charissimus
Colleg: Med: Lond: Anatomes et Chirurgiæ Professor
Assiduus. et Fœlicissimus.
Quibus Illustrem Construxit Bibliothecam
Suoq Dotauit et Ditauit Patrimonio.
Tandem
Post triumphales
Contemplando. Sanando. inueniendo.
Sudores.
Varias domi forisq Statuas Quum totum circuit
Miccrocosmum Medicinæ Doctor ac Medicorum
Improles Obdormiuit.
III°. IVNII. Anno. Salutis CIↃ IↃCLVII. Ætatis LXXX°.
Annorum et Famæ Satur.

There have been many portraits of the great anatomist, but, for reasons I am about to give, the bust which stands above this inscription is, I think, the most interesting of all. In studying the bust in 1869 I came, as I have said, to the conclusion that it must have been copied from a cast of the face of Harvey, taken after his death. I was, however, unwilling to trust my own judgment on this point, and therefore it was that I asked Mr. Woolner to accompany me on the last occasion of my visit, and to give his opinion on the subject. Mr. Woolner was good enough to comply with this request, and, after a very careful examination, he too has come to the decisive conclusion that the bust was from an after-death cast. Every part of the evidence, Mr. Woolner tells me, points to this decision. The features are those of a face dead. The sculptor, whoever he might be, has exhibited no knowledge of sculpture, except when he was copying what was directly before him. With the cast of the face for his copy, he has shown true artistic delineation, but all that he has been obliged to add, to make up the bust as it stands, is of the worst possible quality. The ears are placed entirely out of position; the large redundant head of hair is altogether out of character, imaginary, and badly executed, and the drapery of the shoulders is simply despicable. We have nevertheless to thank the rude sculptor for the care he has devoted to the face, and we are enriched by the knowledge, supplied to us by the greatest of living English sculptors in our day, that the true lineaments of William Harvey, as they were seen at the time of his death, are in our possession. These lineaments indicate a face at once refined, reflective, and commanding, a far nobler portrait of the man, as I think, than any that has passed to us from the hand of the painter. In order to get the features, as shown in the bust, into the sharpest possible outline, I instructed Mr. Day to raise his camera so as to take a photograph in profile, in such position as Mr. Woolner felt would give the most perfect view. The result left nothing to be desired, and in the third drawing the profile is reproduced with singular fidelity. If the reader will turn the page round so as to make the face look upwards he will see William Harvey as Aubrey, Sir Charles Scarborough, and other friends saw him before the solderers closed his body in the shell which still remains.

THE VAULT AND SARCOPHAGUS.

In the fourth engraving the reader will find the eastern view of the church at Hempstead; and if he will look at the lower building on the right-hand side, he will see a double arched window and a door, with a tombstone between them. Immediately behind that tombstone is the window in the wall of the vault beneath which the foot of the sarcophagus containing Harvey lies. To enter the vault we have to go a few steps along the side of the building which looks to the north, and in which there are two windows. In the ground beneath the first of those windows is the entrance that leads down to the vault. Two folding trap-doors give the admission down a flight of brick steps. When we reach the bottom of the steps, we find ourselves in a rather large room, with brick floor and almost flat ceiling, with another vault beyond, the door of which is nearly opposite. To the left, as we stand at the foot of the steps looking northward, is the little east window of which I have spoken, and beneath which, with his feet towards it, lies Harvey. By his side, in leaden shells like to his own, lie several other members of the Harvey family; and in the extreme left-hand corner are coffins one above another. All the leaden shells or cases have on them inscriptions, that immediately next to Harvey being rather long, but still very legible; it describes one Matthew Harvey, who was at the battle of the Boyne with William of Orange.

To obtain a picture of the sarcophagus containing Harvey himself I lighted up the vault with the magnesium light, and thus enabled Mr. Day to take with this light, and with the light of the sun from the window, the photograph from which the engraving (No. 5) has been drawn by Mr. Evans. The precise position and form of the sarcophagus is thus brought to view. It is the sarcophagus on which the light is falling from the window, and on which the breastplate is indicated.

The sarcophagus containing what there still may be of Harvey lies direct on the floor of the vault, and has never, I believe, been raised on any support. The attendant at the vault declares that it has never been moved from the position in which it is now placed. Speaking from first recollections, I believe that in 1847 no other cases were near it; but I made no measurements until this last visit, and no correct notes, so I cannot speak positively; and, as at Drs. Stewart and Quain's visit, it lay in the centre of a row of twelve other similar shells, my memory may be at fault.

The leaden case or sarcophagus is roughly shaped out in the form of the body. The head part has the rude outline of a face, with mouth, nose, and eyes; the neck is wide and the shoulders expanded. The breastplate is broad, and the inscription upon it is in raised letters. The sixth engraving gives the inscription from a rubbing. The body of the sarcophagus is long, and tapering towards the feet. At the feet the lead turns up as if to receive the feet at a right angle to the body. In the middle of the shell, extending from the middle of the trunk to the feet, the upper surface has now collapsed, so that the inner upper surface of the lead all but touches the lower inner surface. This collapse of the lead is very much greater than it was ten years ago.

The following are the measurements of the sarcophagus, taken by my son, Bertram Richardson, on July 19th, 1878:

	Ft.	In.
Extreme *length* from crown of head to toe ...	6	3
Breadth across shoulder	1	9
,, ,, pelvis	1	4
,, ,, feet		7
Depth, measuring from surface line above to the floor of the vault,—at shoulder,		10
Ditto, at pelvis		6
,, at ankle		5
,, at foot, heel to toe		8
Breastplate	12 inches by 8	

These dimensions were taken with the idea that they might have afforded evidence of the stature of Harvey during life. They evidently do not give the least evidence on this point. Harvey was a man of small size, and the case in which he was buried was obviously made of much greater dimension than was required.

In the upper surface of the leaden case, at the point where the depression is most determinate, is the large crack, or opening, to which reference has already been made. This crack is fully six inches long. Owing to the greater collapse and the sinking in of the lead, the fissure is not so wide as it was in 1868; indeed, the edges are now closed to a space of half an inch at the widest part.

The question which interests us most has yet to be considered: Are any remains of Harvey left in the sarcophagus? Expecting to find the opening in the lead in the same condition at my latest visit as it was at the latest but one, I took with me a small mirror, a magnesium light, and every appliance for making what may be called a sarcophoscopic investigation. To my dismay, I discovered that the opening is now almost closed by the collapse of the lead, so that the reflector could not be used; while the shell is positively filled, at the opening, with thick, dirty fluid, like mud—a fluid thick as melted pitch, and having a peculiar organic odour. This extends into the case above and below the crack or fissure. There can be little remaining of the body; not much, probably, even of the skeleton.

In this brief recital I have, I trust, carried the readers of THE LANCET with me to the last that is mortally left of William Harvey. One duty more lies before me—namely, once again to urge that these honoured remains, though they are now better preserved than they have been in some times past, and though little of them may exist, should be conveyed to their one fit and final resting-place,—Westminster Abbey. There, laid two feet deep in the floor, in some quiet corner, and covered merely with a thick glass plate, the leaden sarcophagus, still visible to those who take an interest in one of the most remarkable men in the history of science, would be protected for ages, instead of being destined, as it now certainly is, to fall into a mere crumbling, unrecognisable mass, in the course, at furthest, of another hundred years.

THE deaths registered in London last week numbered 1547, and included 7 from small-pox, 18 from measles, 54 from scarlet-fever, 11 from diphtheria, 31 from whooping-cough, 24 from different forms of fever, 15 from diarrhœa, and 428 from diseases of the respiratory organs. These figures show a decline in the death-rate from each of the diseases of the zymotic class, save diarrhœa, as well as a decrease in the mortality from thoracic diseases.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 30, 1878.

MORE than three and a half years ago we wrote the following words, with reference to the appropriation of a certain part of general hospitals for patients who could afford to pay for their accommodation, but whose circumstances were such that at home they could not command the conveniences or comforts needed during a prolonged illness:—"We do not see why each general hospital should not introduce its pay wing. The plan is well worth trying."[1] We had previously said, "We do not question the advisability of an increase of accommodation for the classes we have mentioned, either as a special department of already existing hospitals, or as a separate institution. The enlargement or adaptation of parts of existing general hospitals for the purpose would have great advantages in the organisation of the medical and nursing staff, and would save much outlay. Nor do we think that it need interfere with the proper objects of such institutions as charities."[2] We have ever since urged the scheme upon the attention of the profession, and those specially interested in medical charities, and we are at last to see it put to a practical test at St. Thomas's Hospital.

We learn from the daily journals, that at a General Court of Governors of the hospital, held on Nov. 20th, it was decided that the principle of admitting paying patients should be adopted, and steps taken to prepare a scheme for the approval of the Charity Commissioners. The fully detailed statement of the reasons which have led the Treasurer to propose, and the Governors to sanction, the adoption of the plan will be found elsewhere. At present we shall deal rather with certain questions involved in the carrying out of the scheme, and especially with the relations to the staff of the hospital and the profession in general.

Viewed from a public point of view, there is no doubt that the adoption of this plan is a decided benefit. It will enable those who are otherwise unprovided for, and who by reason of their position are either unwilling to enter a general hospital, or who willingly or unwillingly do so enter, and rob the poor of just so much of the benefit they might receive, to have the benefits of a hospital by paying a fair equivalent. It will be a means of checking the abuse of hospitals by the well-to-do, which, rampant in some out-patient departments, is not unknown in respect of in-patients. To the hospital also the scheme, if a success, may be expected to contribute not a little money and some reputation, and will unquestionably enlarge its sphere of usefulness. It is openly avowed that the money question is one great reason for its adoption at St. Thomas's; it has been suggested with that object by the Charity Commissioners, and even alluded to by Lord SELBORNE in the judgment of the House of Lords on the rating appeal; and the present treasurer, Mr. Alderman STONE, has judiciously fallen in with a suggestion which may be hoped to relieve the financial embarrassment into which the hospital has fallen, and at the same time to increase its reputation.

Yet we cannot but foresee considerable difficulties in the elaboration of a working plan which shall do justice to all concerned, and its bearings especially upon the medical staff and the profession at large ought to be carefully considered. It is, we presume, out of the question that the paying wards should be subject to a different discipline or control from that general in the hospital, or an *imperium in imperio* established, and it is not at all probable, therefore, that any but the physicians and surgeons of the hospital will attend the patients. The plan of allowing the patients to select their own medical men, which is adopted at some similar institutions, could not well be introduced there without creating a very unpleasant feeling, or without constituting a new staff of house-surgeons &c. for this purpose alone. Nor, we believe, is any such plan in contemplation. It may be taken for granted, therefore, that the physicians and surgeons will have cast upon them the duty of attending these patients, who will, we suppose, be admitted under exactly similar conditions with the other patients, in having no voice in the selection of the medical officer by whom they are treated. And we may assume also that the beds will be duly apportioned to each physician and surgeon just as if they were in the general wards.

Certain objections have been raised which may be considered in detail. It is said that the duties of the staff will be increased, whilst they will reap no proportionate benefit from their additional work. But we think this will hardly bear consideration in the case as it stands at present, even supposing that no addition is made to the pay of the staff (which is a mere honorarium at the best). The number of available beds is over 600; only about 350 are in occupation owing to want of funds. The total number of paying patients, if the most sanguine anticipations are realised, will be only 60; raising the occupied beds to 410. The number of the staff is as high, we believe, as when there was a far larger number of beds occupied than at present; and the additional beds would give to each physician and surgeon an increase of only six beds. If, however, the number of beds were still larger than could be conveniently worked, it would be easy to meet the difficulty by giving each of the assistant staff a few beds—a plan which is followed with great advantage by other large hospitals.

But we fully admit that if the patients were of such a class that they could afford to pay for medical advice, as well as board, lodging, and nursing, both the staff and the profession in general would have a right to complain of injustice if they received no remuneration. From those who are merely driven by stress of circumstances to take advantage of the hospital we can hardly believe that the staff would desire to take any additional payment. But as to those of a wealthier class, who can afford separate accommodation and the usual professional charges, it would be highly unjust that those who attend them should not be properly paid. They would have all the benefits of hospital nursing and hygiene, and the hospital would receive a sufficiently profitable return. The patients would pay far less than if in expensive lodgings, with their own nurses and attendants. There ought to be no deduction from the proper and usual fees, which should be left to individual

[1] THE LANCET, March 20th, 1875. [2] Ibid., March 6th, 1875.

arrangement. It may be said that this would be giving the staff of one particular hospital an unfair advantage, and would also be injurious to general practitioners. The former objection is met by the rejoinder that other hospitals can do the same; the second is, we believe, groundless. The cases suited for such more expensive accommodation are those of grave operations, or special cases which would in London come under the treatment of consultants, and more especially those who would otherwise, coming up from the country, engage expensive lodgings. The number for whom such superior accommodation is to be provided is, we understand, only six at a time, a number too small seriously to affect any general practitioner. It must be distinctly understood that we advocate the plan solely in the interests of the class who are not in a position to pay for the necessary nursing, accommodation, and other requisites, in addition to medical attendance. For these and others who, being of a better class, are sent to the hospital by their own medical attendants as cases of special interest or in view of special treatment, this accommodation is mainly applicable. A large number of such cases do now find their way into general hospitals, and it should be distinctly understood that under the new arrangement they merely pay for their board and lodging and nursing, instead of being the recipients of a charity to which their circumstances do not entitle them, and which the hospital can ill afford. Viewed in this light we can see no interference with general practitioners, whose interests ought to be considered with the most scrupulous care.

In fine, then, if the scheme be developed with sound common sense and a due regard to the interests of the medical profession in general, and carried out under vigilant supervision and with firm and judicious control, we cannot see that it will damage the interests of anyone. The division into two classes—the one class treated in all respects as hospital patients, paying for the necessaries of accommodation only; the other of a higher class, paying in a higher ratio, and being treated as private patients both by the hospital and the staff,—the careful selection of the patients by a competent medical officer, and the weeding out from the general wards of those who can afford to pay,—will, we doubt not, make the scheme a success, and be a step in the direction of a great improvement in hospital management.

THE Metropolitan Board of Works, at the suggestion of their Engineer, Sir J. W. BAZALGETTE, have organised two expeditions for the purpose of allowing their members to inspect for themselves the condition of the Thames between London-bridge and Gravesend. Last week the saloon-steamer *Alexandra* left London-bridge at 10.30 A.M. with the party on board. It reached the Barking Outfall just at high water, and, after watching the first issue of sewage, the party proceeded in advance of the sewage stream to Gravesend. Shortly afterwards the steamer returned, meeting the sewage, and inspecting carefully its character, and the limits, evident enough near the outfalls, of the outpouring torrents. Samples of the water were drawn from time to time with all possible fairness, and were inspected—that is, looked at, smelt, and even tasted by those present. As might have been expected, the samples drawn at the top of the tide were less turbid than those taken during the ebb; and those taken in the lower reaches before the advent of the sewage less turbid than those taken in sewage-polluted water, or even in the crowded and much-agitated Pool.

It is evident that such inspections as these have but a very limited value. The "test by tumbler" is trusted by few, and certainly not by the scientific officers of the Board, or those of its members who have practical experience in the matter. Those who know town sewage know that it sometimes has but little smell in the open air, and that during dry weather it is the quality rather than the quantity of its suspended matter which renders it so noxious. Urine diluted with water has no smell and no suspended matter, and the rice-water discharges of cholera would pass the tumbler-test respectably; yet both would surely be classed as noxious. Examinations made in the winter months, when putrefaction is slow and the rainfall heavy, are, moreover, unduly favourable to the water.

We by no means intend to impute to the Board that they wish by such rough inspections to create unfair impressions among their members or the public. We understand that the position of the Board at the present time is simply one of inquiry. They, as custodians to some extent of the public purse, are properly anxious, before advising any large expenditure, to be certain that it is necessary. They admit that the addition of sewage to the river is an evil, and that means are known by which it might be lessened or removed. But they appear for the present to doubt whether the evil is so flagrant, and the practical injury caused by it so great, as to justify the large expense which remedial measures would involve. That this doubt will pass away before long we fully believe.

It is unnecessary, after the full and careful researches recently published in these pages, to discuss again the scientific evidence in regard to the sewage pollution of the river, but a few general remarks may perhaps be found useful. The sewage of all London, and of all its inhabitants, healthy and diseased, is now thrown into the Thames. Much of this sewage is oxidised in the river, and much probably finds its way, sooner or later, to the sea. But, owing to the varying intensity of the spring and neap tides, which succeed one another at intervals of about a week, much of the sewage is carried above the outfalls, and kept oscillating about for a considerable time before it is destroyed or carried away. There seems no doubt that the river at Woolwich, and even higher, is generally polluted in this way. This effect is increased by the numerous bends of the river. It is familiar to every yachtsman that in each of these bends a sluggish eddy is formed by the tide, and therefore the water, with its foul freight, lingers for an indefinite time in the bay, thus affording every facility for the deposition of mud. Erith, Grays, and Greenhithe all stand at the head of bays of this kind.

Next as to the mud-banks. No one pretends that they are caused wholly or even chiefly by the sewage. It is even probable that in dry weather the quantity of mineral detritus carried in from the sewers is not very great. In storm time, however, it is, and must evidently be, considerable, and we think the Board do not sufficiently estimate the injury done to the river at such times. But whatever be the fact as regards the quantity, it is certain that the quality of the mud is injuriously affected by the sewage.

It requires no chemical analysis to prove this, and we think that no one would seriously deny it. The sickening fæcal odour of the mud at Erith at low-water on a hot day would alone be sufficient evidence of the fact. Those who remember the mud at the same place before the opening of the sewage outfalls can appreciate the difference. Many inhabitants of Erith and its vicinity have assured us that they have at times recognised the peculiar sewage smell distinctly, even at a considerable distance from the river, and there seems to be an increasing belief in the district that actual injury to health results from it. Sir JOSEPH BAZALGETTE holds that this is a delusion, and that the smell complained of arises solely from certain manure works which constitute a great and acknowledged nuisance in the neighbourhood. The smell from these works is, however, so well known to all the inhabitants, and is so unlike that of sewage, that this explanation can scarcely be accepted. It appears, moreover, that the sewage smell is often perceived when the wind is not in the line of the factories. The Board urge with perfect truth that there are others besides themselves who offend against sanitary laws in the Thames Valley. The Beckton gasworks pour a particularly foul stream into the river from their culvert. The North Woolwich and East Ham sewage assists in the defilement. The air is polluted in many places by the factories on the river-banks, and there are other offenders. But this is obviously a weak argument for the Metropolitan Sanitary Authority to employ. They, of all others, ought to be above reproach in the matter. It is surely not right that the largest and richest city in the world—the metropolis of our vast empire—should go on from year to year setting to all the world the example of river pollution, and that, too, in the face of an Act of Parliament passed with general approval for its repression. They are saved from the penalties of that Act by a special exemption, but the exemption is one of which they can hardly feel proud. The Erith Local Board is, at the present time, threatened with notice from the Thames Conservators, in conformity with the Rivers Pollution Act, to discontinue the use of a drain which carries the sewage of a few cottages into the river. Considering that Erith is about two miles below the Crossness outfall, and about the same distance above the new West Kent outfall, the attack on this petty pipe appears rather ridiculous, and forms a powerful commentary on the present state of the law.

We will conclude by repeating our conviction that the good sense of the Metropolitan Board of Works, guided as it is by experienced and skilful scientific officers, will shortly induce them to take some decisive action in the matter. They must remember that the condition of the river is important not only to Woolwich, Erith, Gravesend, and the other towns and villages on the banks, many of which are increasing rapidly, but also to the tens of thousands who travel on its waters. The Thames is not only a great commercial highway, it is also a great pleasure-ground for the Londoners. The crowds who in the summer season seek "happy days" at Gravesend, Erith, or North Woolwich, have surely some title to consideration, and it can hardly be asserted that their pleasure is not marred by the foul streams which pour from Barking and Crossness.

HAECKEL has lost no time in replying to the attack made upon him by VIRCHOW, to which we recently drew attention; and in a pamphlet we have received, entitled "Frei Wissenschaft und frei Lehre" (or Free Science and free Teaching), he repels with considerable vigour the statements made by VIRCHOW on the uncertainty of modern scientific theories. He commences by referring to the fundamental law of the Germanic nation, "Science and instruction are open to all"—a law so universally recognised that it is introduced even into the Studentenlieder. Then, taking up the subject of development and creation, the knowledge gained of late years, he says, has gradually circumscribed the question to the alternative that either the organisms have undergone natural development, in which case they must have all descended from a primary form common to all—Monismus; or they have been miraculously produced—Dualismus. Between these two the choice must rest; there is no *tertium quid*. Defining a little more fully the doctrines of evolution, of descent, and of natural selection, he proceeds to condemn VIRCHOW'S demand for experiment in proof of each. "Have we not," he says, "experiments enough before us? What are the various breeds of horses, of pigeons, of dogs, and other animals—which, when they are seen for the first time by any skilled observer, would undoubtedly be regarded as separate species, if not different genera—but the result of protracted experiments? The morphological definition of species is not absolute, but relative, as is evident from the fact that no two taxonomists agree in their classification of many animals; nor have they any physiological importance, since even the last retreat of species-mongers—the unproductiveness of mule animals, and the productiveness of animals of the same species—has broken down. On the one hand, the lion and the tiger, the rabbit and hare, will breed together; and, on the other, the Portosanto rabbit and various races of horses and dogs, as well as of roses and hyacinths, refuse to propagate." How various may be the descendants of the lower forms of life HAECKEL has himself shown in his monograph on the Calcareous Sponges, his investigations leading him to the conclusion that, according to the taste of the observer, 3 or 21, or 111 or 289, or 591 species may be made, indicating in no uncertain manner the probability of the transformation of species. All this and much more, as the evidence derived from embryogeny, and from the presence of rudimentary organs, VIRCHOW either ignores or passes lightly over. Indeed, VIRCHOW, he says, is not now qualified to form an opinion upon such points, since his labours of late years have been political rather than biological. Just such a deviation from the paths of science was witnessed in the case of ERNST VON BAER, and with a similar limitation of the mental horizon. Both began life as great reformers of the then prevailing doctrines, both failed to bring their knowledge up to the times, and "hence the authority of both in their later life fell away." VIRCHOW does not know how ignorant of morphology he is.

Referring to the skull, HAECKEL declares that too much attention has been paid to craniometry, and too little to the development of the skull, so ably worked out by GEGENBAUR, and he might have added by PARKER. In 1870, VIRCHOW published a popular sketch of the man-and-ape controversy, which he concluded by saying, "It is obvious, then, that it

is impossible for an ape to become a man by progressive development." From VIRCHOW's own exposition and experiments exactly the opposite deduction should, HAECKEL thinks, have been drawn—to wit, that it is obvious man can *only* have resulted from the progressive development of the ape. He does not entertain, but repudiates strongly, the idea that any definite conception of that ancestor can be formed, or that it more than resembled any of the present species.

HAECKEL makes a strong point against VIRCHOW in reference to the *Zell-seelen*, or mental powers of the cell theory. VIRCHOW, in his lecture, had ridiculed the idea that cells or plastidules possessed the power of performing mental operations. "If," he said, "I explain attraction and repulsion as exhibitions of mind or psychical phenomena, I simply throw the Psyche out of the window, and the Psyche ceases to be Psyche." "Can the writer of this," says HAECKEL, "be the man who five-and-twenty years ago maintained at Wurzburg that the psychical activity of man and animals depended on mechanical processes in the organs of the mind; that these organs, like all others, were composed of cells; and that the activity of the organs is only the sum of the activity of all the cells composing them? How are such statements reconcilable with his present view?" And HAECKEL proceeds to advance a very thoroughly materialistic view of the soul, referring it ultimately to the play or mechanics of the constituent atoms of the nerve-tissue; and he quotes many expressions in VIRCHOW's earlier writings which lend support to this view. Is the possession of a soul to be limited to those animals only which have a central and peripheric nervous system, sensory organs, and muscles? Surely, he says, all these various organs of the mind, in the higher animals, only result from the division of labour amongst simple cells, which have sprung from the cells of the epiblast, and these again from the single cell of the ovum. EHRENBERG maintained to the end of his life that all infusoria possess nerves and muscles, sensory organs and psychical organs; but SIEBOLD showed thirty years ago, and all recent observations support his statement, that the infusoria are unicellular organisms; the conclusion, then, is obvious that a single cell possesses the attributes of a sentient and thinking being. In the Siphonophora, or oceanic Hydrozoa, which form chains, in the Physalia and others, the distinction between the central or personal soul of the many-celled organism and the individual or elementary soul of the several cells, becomes first apparent by individual as well as common sensation and will being clearly manifested. On the monistic theory the gradual development of the complicated activity of the human mind is easily and logically deducible from his origin in a single cell, which, as soon as fertilised, virtually possesses its psychical powers, and the descendants of which are drafted off to special duties. But on VIRCHOW's dualistic conception the psyche must be introduced at some moment of embryonic life—probably, he suggests, at the period when the medullary tube is formed from the epiblast!

To the statement made by VIRCHOW, that only well-ascertained facts should be taught, HAECKEL replies derisively, "What do we know for certain? Even in mathematics, the most certain of all human knowledge, men are now disputing whether there may not be a fourth dimension in space. What do we know of the nature of matter or of force? What is there certain in physics and chemistry? Why, then, is the origin of man a subject on which nothing should be taught, because it is uncertain?" The value of VIRCHOW's early works was dependent, not on his facts, for the famous "*omnis cellula e cellulâ*" has gone the way of HARVEY's still more celebrated doctrine, "*Omne vivum ex ovo*," but on his path-breaking theories. What, then, does VIRCHOW regard as certain? The dogmas of the Church? "No wonder," says HAECKEL, "that the Church organs throughout Germany are jubilant at what they consider to be the recantation of the 'great materialist.'" We do not propose to follow Professor HAECKEL into his argument that the descendena theory has nothing to do with the prevalence of Socialism on the Continent, but the passage-of-arms between the two learned professors of Berlin and Jena is sufficiently interesting.

THE proposal that what are now *private* asylums for the insane should be placed on a public basis and recognised as public institutions, is neither the fruit of any want of confidence in the present class of proprietors, nor does it assail the rights of private property, except in so far as all measures to secure the greatest good for the greatest number may be open to that imputation. The scheme we have propounded is at once equitable and practicable. Let those who have embarked capital in this venture receive from the State (acting through one of its central departments) or the municipal corporations bonds to the full extent of their investment, bearing interest at a rate calculated on the average of the previous three years, and guaranteed. These bonds would be negotiable, and therefore the holders could not with any reason complain of the appropriation. The "business" of the asylums, with the plant and tenements, would then become public property, subject, of course, to the satisfaction of such collateral claims and interests as might be found to exist. There is no ground for supposing that these would be considerable. The superintending physicians and surgeons, with their staffs, might be confirmed in their offices, but they would become public servants, with stipends payable out of the common fund. If the enterprise pays now, it would pay even more handsomely under public management, and no loss or burden on the ratepayers would result from the change of proprietorship. In other respects, so far as the conduct of these asylums is concerned, matters would go on as at present. There would be no sacrifice of privacy, and all that the friends of insane patients and the insane themselves gain from having to do with private establishments would be assured to them as completely under the new system as under the old. Meanwhile the sting and peril, the unsatisfactory element, of the existing order of things, would be eliminated. Medical officers who are striving to *cure* cases of mental disease would no longer be hampered in their work by considerations of finance, and, which is a most important though generally forgotten danger, patients would not be discharged prematurely by administrators who are keenly alive to the position they now occupy, and, in their anxiety to discharge a public duty, sometimes fail in that which is personal to the insane, by discharging them from the pro-

tection of an asylum before they are again able to cope with the disquieting and, to them, maddening influences of the world.

It is not always by leading to the undue detention of patients the private asylum system does mischief. We are far from asserting that the inmates of asylums are always discharged as promptly as they might be, with safety to society and advantage to themselves; but there is no ground for the allegation that instances of wilful delay are of frequent occurrence. It might not be easy to find a genuine case of this kind of wrong-doing in recent history. If patients are kept too long, it may be because they are overlooked; and this evil is quite as likely to occur in a public as in a private asylum; indeed it is more likely to occur in the former class of institutions, because they are much larger, and the tendency of the modern system of treatment is to deal with crowds of the insane, instead of with individual patients in detail. There is, however, a great and pressing peril of haste in the discharge of the insane. Scarcely a week passes without the commission of some tragic act by a patient "recently discharged" from some asylum. The unconscious, or, at least, *legally* irresponsible, perpetrators of these deeds do not exclusively come from private houses, but it is to the private asylum system they owe their premature discharge. The arrangement which makes it commercially advantageous to retain patients in a "licensed house" has begotten a feeling of anxiety to earn a reputation for rapid discharges, or, as they are euphemistically called, "recoveries" and *cures*. The largest proportion of discharges is held to be a recommendation; and although, so far as the private houses are concerned, this feeling may be to some extent controlled by commercial prudence, it has extended to public institutions, and it not unfrequently happens that several "recoveries" or "cures" are got out of the same case before it is finally restored to sanity. There is, in fact, on the part of many physicians in charge of the insane, both at private or public establishments, a nervous dread of being supposed to keep their patients too long. This leads to hasty discharges, and, it is to be feared, the particular inmates discharged are not always the most fit to be trusted with the responsibilities of self-control. This feeling is unquestionably the fruit of the private asylum system, and it has been intensified by the agitation which has of late been carried on too recklessly, and, in many quarters, without such practical knowledge of the asylum system as is necessary to show how it really works.

The growing interest which is taken in this important subject gives hope that, at length, the reforms we have been advocating for nearly forty years may be inaugurated. In the year 1841 the collateral evils and the bad working of the system of "private interest" in the cure of the insane were clearly and forcibly urged on the attention of the House of Commons, and it was contended that the Legislature "ought to set about to devise means of remedy for these things." Great changes have taken place in the management of asylums since that date, and many humane improvements have effaced the worst blots from the system, but the underlying evil—the cause of all the mischief and anxiety—remains. The system now, as then, "calls into operation the principle of selfishness common to human nature." To the credit for humanity of the keepers of asylums in recent years, it must be admitted that few, if any, great scandals have occurred, and, on the whole, the insane are well treated and comfortably housed, while such luxuries as their condition will allow them to appreciate are liberally supplied; but this does not affect the system. It is still possible to send alleged lunatics into asylums on certificates given by persons who have no sufficient acquaintance with mental disease, and who, with the best and purest intentions, can only do right by accident. It is still possible that a weak mind may be thrown out of gear and wrecked by the treatment it receives in the process of certifying and removal to an asylum, with the hideous novelty of the new surroundings. It is still possible that inmates who have never been insane, only bewildered or scared, or who have recovered, may be overlooked by the superintendents of asylums, and by the official inspectors, because their cases have not been individually watched. It is still possible that attendants may ill-use their patients and hoodwink their employers. And, unhappily, it is still *possible* that the proprietor of an asylum "will argue that he gets £400 a year for the charge of 'a patient' so long as he remains under that roof, while if he recovered, then he (the proprietor) would lose that annual amount." Possibly nothing which has occurred of late years can be held to justify a *demand* that the "private asylum system" should be abandoned—on the ground of flagrant abuses. It may be true that every allegation of wrongful detention in recent times has broken down, and that all the industry of agitators has failed to find a case on which to rest the claim for public sympathy. Nevertheless, the system is rotten to its core, and ought to be swept away. It is unwise and unsafe that any private person should benefit by the continuance of a malady which deprives the sufferer of the right of self-control. It is opposed to the interests of public prudence that the power of imprisoning should be entrusted to persons who are not direct and responsible agents of the State. It is monstrously wrong and perilous, that any mere written opinion of a case, given perhaps by a person who has never seen a lunatic, read a page of any work on mental disease, heard a lecture, or been asked a question on the subject at any examination, should constitute a "warrant" upon which the individual named therein may be forcibly arrested, and incarcerated in an asylum, from which escape is prevented by vigilant attendants, and bolts and bars. It is indispensable that the insane should be placed under proper restraint; and, practically, it is in most cases necessary that they should be transferred to asylums; but the step taken when a person is deprived of his or her liberty is so grave and responsible that it should be carried out under the supervision, and by agents, of the public authority. It is not, as we have shown, needful that the advantages of a private process should be sacrificed, but what is done may be so done that no misgiving should exist as to the need or the manner in which its exigencies are satisfied without being exceeded.

THE half-yearly examinations for the Fellowship of the College of Surgeons have just been brought to a close. Out of the sixteen candidates examined, nine were reported to have acquitted themselves to the satisfaction of the Court of Examiners, and will, if approved by the Council at its next meeting, be admitted Fellows of the College.

Annotations.

"Ne quid nimis."

OFFICIAL REPLY TO "THE LANCET" POOR-LAW MEDICAL OFFICERS' MEMORIAL.

IN another column we print the reply of the President of the Local Government Board to the memorial signed by a large number of medical officers of districts and workhouses, which was presented as the embodiment of communications made to THE LANCET towards the close of last year. The memorial will be found in No. I., vol. i. 1878. The answer to the appeal made, and the arguments adduced, unfortunately hold out no hope of compliance with the requests preferred. The old lines of reasoning are pursued, and the formidable rejoinder that respectable and competent men are eager to take office under existing arrangements is plied with the accustomed energy. We propose to revert to the subject at an early opportunity. Meanwhile the memorialists and the profession will do well to bestow some attention on the extended reply with which the President has favoured us. If nothing else is directly gained by the memorial, it will have done good service in that it has elicited a full and calm exposition of the views of the Department. Our thanks are due to the Right Hon. George Sclater-Booth for the courteous and exhaustive manner in which he has treated the subject we have ventured to bring under his notice. The subject-matter of the reply must, as we have said, be reserved for discussion in detail. It will, of course, now be possible to address the Legislature on the whole question, from a new platform, with the firm footing supplied by this official *résumé* of the case, upon which the profession may join issue afresh with the Department.

THE MEDICAL SOCIETIES.

THE proceedings of the metropolitan societies during the past week, which will be found fully reported elsewhere, have been notable for several communications of special and varied interest. Thus, at the Royal Medical and Chirurgical Society on Tuesday last, a discussion took place upon the operation of tracheotomy in membranous laryngitis (i. e., in cases of croup and "laryngeal diphtheria"), the subject having been introduced by a paper from Mr. R. W. Parker, whose experience, when holding the office of house-surgeon at the Hospital for Sick Children, had led him to the conclusion that strict attention to the details of the operation, and especially to its after-management, might be the means of frequently averting the fatal issue, which has hitherto been the rule rather than the exception in these cases. Without entering into an inquiry as to the merits of the procedures recommended, it must be acknowledged that a proportion of eight successful cases out of seventeen is very high, and even unprecedented; and if such a rate be maintained throughout a more extended experience a decided advance will have been made in tracheal surgery. At the same meeting a case of thyrotomy, performed for the removal of a cicatricial web in the larynx, was related by Dr. Sémon, although ultimately the recurrence of cicatrisation reproduced the stenosis. Then, at the Clinical Society, not only was the subject of excision of the tarsus for talipes discussed by Messrs. Bryant and Davy, and another example (shown by Dr. Duckworth) of "iodide rash" added to the now long list of such cases, but the Society had the advantage of receiving details of a unique case of watery discharge from one nostril, by Sir James Paget, who inclined to the belief that the fluid in question was either cerebro-spinal in origin, or was possibly secreted from the frontal or ethmoidal sinuses. At the same meeting a discussion took place upon the surgical treatment of pulmonary cavities, a discussion which was rather hampered by the fact that the case (reported by Dr. C. T. Williams) brought forward in illustration of the subject was complicated by empyema, and the operation of "pulmonary paracentesis" was not strictly performed in it. The case, however, well illustrated the difficulties in the way of exact diagnosis of pulmonary cavities, and although some speakers were led by it to talk of the treatment of empyemata, the general opinion seemed to be that cavities at the base of the lung could be more safely evacuated by tapping than those seated at the apex, a view which would materially limit the range of the procedure. The subject was not exhausted, and we may hope to hear more of it. Lastly, at the Medical Society two evenings have been devoted to the subject of the treatment of spinal curvature by the rigid jacket, and very divergent opinions have been expressed, some, like Mr. Owen, who opened the debate, disputing Dr. Sayre's theory and discountenancing his practice of suspension, whilst others, as Messrs. Durham and Golding Bird, strongly upheld both Sayre's principles and practice, and others again doubted the advantages of his well-known method over other forms of "jacket." It is seldom we have a week at the societies so full of matters of actual clinical experience as the past has been in this respect.

SEA-FOG SLAUGHTER.

AGAIN the perils of the sea are pressed home upon us under acutely painful circumstances. Fogs and darkness are known conditions of exceptional danger, but the lessons of warning taught by repeated calamities are still unheeded. When one of these lamentable "running down" cases occurs we are sure to be told that "had the fog been less dense, the obstacle would have been avoided." Of course it would; but if it is not the fog that kills, it is darkness, or speed, or the neglect to show lights, or some misconception as to the "rule of the road at sea"—always some excuse pleaded in extenuation of an offence which cannot under any circumstance be justifiable homicide, and therefore ought not to be excused. The casting the responsibility on Providence, and looking on these utterly needless misadventures as unavoidable—in short, the "visitation" hypothesis—is in itself a most regrettable cloak for neglect. It will enhance the difficulty of reform intolerably if perfectly well understood, and therefore foreseen, conditions are to be admitted as pleas for forbearance. Knowing the danger that exists, it is easy, and should be imperatively incumbent, to observe every precaution. The course of vessels approaching or leaving the principal ports, and entering or departing from rivers, ought to be clearly and definitely laid down, and a complete and precise code of signals organised and enforced. It is useless speculating on what might have been done after collisions and wrecks occur. The prevention of these generally avoidable calamities is the object to which intelligent forethought should be addressed, and, necessary rules being formulated, the slightest non-observance ought to be visited with pains and penalties wholly irrespective of the result, whether that be a fearful catastrophe, or the almost miraculous immunity from consequences which more frequently than we have any right to expect is "permitted" in the face of crass neglect and folly. For one calamity there are, probably, a score of easily avoidable, and therefore inexcusable, collisions; but only the serious cases are brought to public knowledge, and hence the occurrence of accident is so frequent and terrible an experience, whereas the peril ought to be small, and the instances in which it is actually incurred extremely rare. As it is, chagrin and indignation almost overcome the feeling of compassion which calamities like those which have just occurred in the Channel and in the Mersey mournfully claim.

THE "WHITEHALL REVIEW" CALUMNIES.

THE *Whitehall Review* does not appreciate our remarks on a recent paper which appeared in its columns above the *nom de plume* "Peter the Hermit." This is scarcely surprising, remembering that nothing so greatly offends an agitator as to be assured that the supposed grounds for his complaints and remonstrances have no existence outside his own disordered imagination. It was, be it understood, not on the subject of vivisection we joined issue with the *Whitehall Review*. Enough, much more than enough, has been said and written on that topic to vindicate the medical profession. Our objection was, in this instance, taken to an article for which, by stooping to print it, our contemporary has made itself responsible. The article in question contained some of the most offensive and indecorous aspersions on the humanity of hospital physicians and surgeons we have read, and it would have been a neglect of duty to have abstained from comment when our attention was called to the matter. We have no wish to enter into a controversy with the *Whitehall Review* or the "illustrious author" whose lucubrations grace its pages. The question of humanity invoked we leave confidently to the intelligence of the public. For the rest, it may suffice to give categorical denial to the allegations which our contemporary now makes against the profession, and we do this advisedly in the following terms:—1. It is *not* a fact that in Glasgow Hospital two patients suffering from hydrophobia were recently experimented upon. The unfortunate incident to which reference is made has been fully and, we believe, satisfactorily explained. 2. The mortality in lying-in hospitals has nothing whatever to do with treatment parturient patients receive at the hands of medical men, but is an untoward result of crowding, and defect of sanitary precautions. 3. Foundling babies are certainly *not* experimented upon by medical men in England, and we do not believe the practitioners of the United States are open to the very serious charge preferred against them. As to the fourth charge, which relates to vivisection, we must repeat that we decline to discuss the question further. It is perfectly useless to remonstrate with a contemporary which has become the supplementary organ of a clique.

ARMY MEDICAL DEPARTMENT.

THE Secretary of State for War has returned from his hurried visit to Cyprus. What advantage, if any, may arise from it remains to be seen. The brief period of his stay in the island, and the meteoric rapidity of his transit to the different stations put out of the question a careful examination of the condition of the troops and the sanitary state of their surroundings. He may have had his attention directed to the comfortless condition of the soldiers, and the necessity for prompt steps being taken to improve their dwellings, their food, and their clothing, but he could not possibly have examined the various details connected with the arrangements requisite to effect such amelioration. The sight of the helpless condition of the fever-stricken men of the 42nd may have had a beneficial influence in impressing upon him the necessity for immediate and efficient measures to prevent a recurrence of such sickness among the garrison, and have convinced him of the advantages which would arise from the organisation of a local corps under British officers. If this be so, and if, in addition, the trip has had the effect of bracing up Colonel Stanley's health for the hard work that lies before him, the time spent on it will not have been thrown away. But it must not be forgotten that his absence has not been without serious drawbacks, and that the public service has in some respects suffered from it. And not the least of the evils connected with it has been the delay in settling what is to be done to place the Army Medical Department on an efficient and satisfactory footing. More than three months have elapsed since Lord Cranbrook's Committee reported the measures which they considered necessary to effect that important object, and as yet nothing has been done. The number of medical officers is now considerably under the establishment, and is steadily decreasing by the usual casualties in and retirements from the service. The rate of decrease is likely to be hastened by the campaign in Afghanistan, for experience has taught us that, in addition to casualties in the field, a considerable number of medical officers are certain to break down in health under the combined influences of climate and hard work. There are no candidates at present at Netley from whom to fill up existing vacancies, to say nothing of those which may result from the war. Surely, then, the Secretary of State should be up and doing. Prompt measures must be taken to obtain an adequate supply of qualified men to enter the service; for we feel well assured that the country will not overlook any neglect to provide the men who are fighting its battles with ample, immediate, and skilful assistance when wounded or suffering from disease contracted on active service. The necessity is urgent, and we trust that before Parliament meets Colonel Stanley will be prepared to propose such a measure as will satisfy the Department, secure an adequate supply of well-qualified candidates, and keep up in the army a corps of skilled medical officers adequate to meet all its wants.

PRIVATE TORTURE.

IT is not without reason that the Home Secretary desires to put a stop to the injurious practice of publishing graphic accounts of the floggings which take place in Her Majesty's prisons, not unfrequently embellished, as they are, with comments complimentary to the "pluck" and "endurance" exhibited by the felons under punishment. At the same time, it cannot be considered in accord with the spirit of the time and the tendency of "public opinion" that the lash having been re-introduced shall be administered in private. Of late several hangings have been carried out in secret, although it was distinctly understood when public executions were abolished that the public should be in some way directly represented in the interests of humanity. This is, we think, a most regrettable violation of prudence. If the "press" is to be excluded, the most hideous barbarities may, for aught the public can tell, be practised. If any accident or malpractice occurred there would be no one present except servants of the Government and the county, and it would be too much to expect that persons burdened with official responsibility should betray the secrets of their own prison house. The matter of the "cat" is especially delicate in all its aspects, and we feel sure the Secretary of State will influence the interests of public justice most advantageously if he rescinds the order by which it has been recently ordained that the administration of this powerful agent shall be private.

SIGNOR CAIROLI'S WOUND.

OUR Roman correspondent, in a letter dated Rome, November 20th, writes:—

"The official report on the wound sustained by Signor Cairoli, when defending His Majesty King Humbert from the assassin, on Sunday afternoon, is as follows:—

"'Naples, 17th November, 1878.

"'Summoned in haste to the Royal Palace this day, 3.10 P.M., I found in one of the King's apartments His Excellency the Prime Minister, Signor Benedetto Cairoli, with a wound inflicted by a pointed and cutting instrument on the lower third of the right thigh on its inner aspect. Its length from above downwards is three centimeters, its breadth one

centimeter, presenting a semilunar form. Its depth from before backwards, inclining from the outer to the inner aspect, is four centimeters, the first two of which extend below the cutaneous tissues, and the other two penetrate into the subjacent muscles. The prognosis indicates incapacity to use the limb till after the fifth day, with tendency to graver symptoms, under conditions of general debility.

"'Dr. COMITO.'

"I have excellent authority for stating that the accounts according to which certain bystanders assisted in foiling the assassin are inexact. The King owed his life first to himself, and next to Signor Cairoli. His Majesty parried the first blow, and Signor Cairoli received the second.

"Shortly after Signor Cairoli was conveyed to bed, His Majesty visited him, and bending over him, embraced him as he lay. His Excellency raised himself with a visible effort, and said:—'I am glad I have shed some drops of blood for the King of Italy.' Signor Cairoli has for eighteen years been slightly lame in the right leg, from a gunshot wound received in General Garibaldi's descent on the Sicilian coast in 1860.

"No one in Italy, with the exception of the extreme democrats, doubts the complicity of the International in the attempt on the King's life, and in the explosion of the Orsini bomb at Florence.

"Another examination of the Prime Minister's wound has shown that had Passanante's poniard penetrated one millimeter deeper it would have opened the crural artery. As it is, the sheath of the artery has been divided."

CAPSICUM.

VARIOUS statements are current concerning the active principle of capsicum. The capsicin of Bucholz is merely an impure alcoholic and ethereal extract. Witting's capsicin is a base, producing crystalline salts with nitric and sulphuric acids. Fellebar regarded it also as a fluid alkaloid forming crystalline salts. Bucheim and Eberbach described an acrid, oily substance, which they called capsicol. Lately, Tresch states that he has obtained the active agent in crystals; while Fleischer has obtained, like Bucheim, a dense, red, aromatic, fatty capsicol, which he has very carefully studied, and to which he gives the formula $C_{24}H_{46}O_4$. Fleischer's researches appeared in the *Erdélyi Muzeum*, but an abstract of them is given by Hogyes in an instructive article on Capsicum in the June number of the *Archiv für Exp. Path. u. Pharmakologie.*

The researches of Hogyes show that the action of capsicum in considerable doses is less poisonous than some authorities have asserted. It has been said to cause, when applied to the skin, redness, vesication, and ulceration; and when taken by the mouth, vomiting, inflammation, and painful diarrhœa. Landerer and Tresch assert that its active principle is capable of causing death. Hogyes, however, found little evidence of action except upon the sensory nerves, with more or less reflex hyperæmia of transient duration, and no permanent anatomical change. It increases the secretion of saliva and of the gastric juice, and favours the peristaltic action of the intestines, and so promotes digestion. Fifty grammes of powdered capsicum caused a dog to vomit twice, perhaps on account of the bulk of the dose, but it was quickly better. The same dog did not vomit after two cubic centimetres of capsicol, corresponding to two hundred grammes of the powder. Capsicol bites the tongue sharply, but applied to the conjunctiva causes only a trifling redness.

It was once thought that capsicum might furnish a substitute for quinine, because brandy, to which it has been added, is a reputed prophylactic against intermittent fever. The results of experiment do not, however, warrant any expectation of an antifebrile action.

HARVEY IN DEATH.

ONE of the most interesting facts connected with Harvey, referred to in our special article of to-day, relates to the profile taken from the bust in Hempstead Church. Dr. Richardson's original observation that this bust is from a cast of the face of Harvey after death, confirmed as it is by the first of English sculptors, Mr. Woolner, makes the profile very valuable. In it we see the anatomist, as it were, face to face, and are enabled to compare his lineaments with the various portraits that have been executed of him. It will be observed that the lower lip has slightly fallen, and that the features have collapsed, as is natural after death. But the outline of the face is very fine, and the placid expression is singularly corroborative of the "easy passport" which the historian Aubrey has so graphically and sympathetically described.

THE RUSSIAN HOSPITALS IN BULGARIA AND ROUMANIA AND THE RED CROSS.

WE learn that it is proposed by the Russian War Department to maintain five of the temporary military hospitals in Bulgaria during the winter—namely, at Tirnova, Schumla, Razgrad, Rutschuk, and Silistria. When the transport of the sick to Russia by way of the Danube will have to cease on the river becoming frozen, they will be sent through Roumania, and in view of this change of route the temporary military hospitals at Giurgevo, Galatz, and Reni will be retained. In consequence of a too great accumulation of the sick in the hospitals at Rutschuk, the Red Cross Society has placed at the disposal of the War Department the three sanitary trains furnished by the ladies of Berlin and Dresden, each of which is provided with all the requisites for the transport of 300 patients. The trains have attached to them sisters of charity for the supervision of the nursing of the sick. The Russian War Department has to contribute forty copecks daily for the maintenance of each patient, but the Red Cross Society provides luxuries in the form of sugar, tea, and wine, and furnishes also a part of the drugs.

The Society has organised an asylum of thirteen beds at the station of Tergovischt, where the sanitary trains proceeding to Galatz stop. With this exception, the assistance given by the Red Cross Society will be simply supplementary. It will supply the temporary military hospitals with tea, sugar, linen, and warm clothing for the convalescents. Sixty-seven sisters of charity are engaged in the eight military hospitals in Bulgaria, and eight others upon the sanitary trains.

MEDICAL TRIALS IN ITALY.

THE Roman correspondent of the *Pall Mall Gazette* draws the attention of its readers to the exceedingly unsatisfactory methods of procedure which are current in Italy with regard to criminals suspected of poisoning. Two glaring instances are quoted. The first is that of a monk, Padre Grossi, who died suddenly in the year 1874, after partaking of a cup of coffee in the house of one Amato, a chemist. Amato was suspected of poisoning Grossi with hemlock, and it was known that ill-will existed between them. Amato was arrested on suspicion, and has just been brought to trial after four years and a half of imprisonment. As there was no real evidence of poisoning, the prisoner was acquitted, after having endured a prolonged punishment for no proved offence whatever.

The second instance was that of a doctor who had been left a small legacy by a patient, who died suddenly. It was known that the patient had aneurism, but the fact that he had gratefully remembered his medical attendant in his will was sufficient ground for the relatives of the deceased to trump up a tale of foul play. Here again there was no real

evidence of poisoning offered to the jury; but they, anxious, it appears, to please both sides, returned a verdict that the deceased died of poison, but that the doctor was innocent of administering it. The trial, which lasted over two months, did not take place until two years and a half after the alleged crime, during the whole of which time the accused lay under the imputation of having committed one of the foulest deeds of which man can be guilty.

It appears that the bias of medical witnesses in Italy in favour of the side upon which they are retained is often very strong indeed, and that medical witnesses are allowed very great latitude in laying their views of the case before the jury, it being no uncommon occurrence for a doctor to spend an hour or more in mistifying his hearers with a learned display of long technical terms. The duty of making post-mortem examinations is often relegated in Italy to those who are willing to do them *cheaply*, the fee for performing this very important function being ordinarily *five or six francs*, and no more! The Procureur-General, whose duty it is to order post-mortems to be made, is often informed that, if he wishes to remain in favour with the Government, the duties of his office must be performed with due regard to that policy of retrenchment which the Italian Government is obliged to follow.

AN IMPROVED MICROPHONE.

SURGEON-MAJOR WALLICH has for some months past been studying the mechanism of the microphone with a view to rendering it available for clinical purposes. Hitherto the microphone, when applied to the chest-wall, has conveyed to the ear of the listener an immensity of confused rumbling, proving effectually that the human body may be made to appear a very noisy machine, but without attaining the one object desired—viz., a clear differentiation of the sounds of the heart and lungs. Dr. Wallich has produced an instrument by means of which the heart-sounds are not only greatly increased in intensity, but remain quite distinct, the character of the two sounds being much intensified. By applying the microphone over the stomach we could hear the noise of water dropping into that organ from the œsophagus, and there is every reason to hope that Dr. Wallich's improved instrument may be made available for the purposes of clinical demonstration. Dr. Wallich intends shortly to test the value of his instrument in cases of heart and lung disease, when we shall return to the subject.

THE EXCRETION OF CARBONIC ACID IN FEVER.

LEYDEN and FRAENKEL have made a series of experiments on the secretion of carbonic acid in the febrile state. The observations were made on dogs, and the amount of carbonic acid exhaled was estimated with one of the smaller apparatuses of Pettenkofer, large enough, however, to receive a dog weighing twenty to forty kilogrammes. With this the excretion of carbonic acid during abstinence from food was first estimated in each case over a period of several days, and then pyrexia was induced by the injection of fresh pus into the muscular tissue of the thigh. Although not very uniform in its effects, this method several times caused an elevation of temperature of from two to three and a half degrees Centigrade. Seven such series of experiments were carried on. The amount of carbonic acid exhaled was found to diminish constantly, although not rapidly, during the period of starvation. The observations on pyrexia were always made during the latter portion of this period, and to control the results the excretion of carbonic acid in the later period of simple fasting was observed also. The conclusion which the experiments suggest is that, without exception, the excretion of carbonic acid is greatly increased by the pyrexia. In those cases in which the elevation of temperature produced was most considerable, this increase in the carbonic acid amounted to nearly 80 per cent.; in four others to from 30 to 40 per cent.; and in two, with a moderate degree of fever, to from 10 to 20 per cent. The increase was always proportioned to the rise in temperature.

The experimenters suggest that the increased formation of carbonic acid cannot alone be held answerable for the rise in temperature. It represents one factor only, although one of great importance. A second factor is the altered discharge of heat under the influence of the cause of the pyrexia, the immediate mechanism of which is probably to be sought in a peculiar change in the innervation of the cutaneous and pulmonary vessels. Hitherto only one consequence of this altered vascular innervation was known—the rigor. Very recent experiments of Bachrach suggest another effect: it has been found that, under ordinary circumstances, substances, easily recognisable in the urine, as iodide of potassium, were absorbed far more quickly if injected under the skin than if administered by the mouth. In fever, however, the reverse is the case; iodide appears in the urine far more rapidly if given by the stomach than if injected under the skin.

THE PRINCE OF NAPLES.

OUR correspondent at Rome writes:—"The health of the Prince of Naples, never robust, has, since the incident of Sunday, the 17th, been such as to cause grave anxiety to his august parents. At the State reception to-day in the Quirinal, Queen Margaret, in explaining to the Vice-President of the Chamber why his Royal Highness could not appear, stated that symptoms of a medico-psychological nature had become painfully manifest in the Prince; that his nights were disturbed by vivid dreams, in which the figure of the assassin Passananti appeared before him, and all the incidents of the nefarious attempt were rehearsed till he awoke with a cry of terror. The nocturnal visitation had recurred so regularly, and left his Royal Highness so exhausted throughout the ensuing day, that Her Majesty has sought the advice of the Court physicians in the Prince's behalf.

HOSPITAL "TREATMENT."

INFORMATION has reached us which renders it expedient to urge the wisdom of taking special precautions to secure the actual administration of such medicine and such food as the physicians and surgeons in charge of hospital patients prescribe. It is worth considering whether the system of nursing and ward supervision by "sisters" offers in practice the superior advantages alleged to be supplied. If what we hear is true, and there is every reason to believe the statements made are trustworthy, it not uncommonly happens that the medicines made up and sent into the wards of hospitals are thrown away, and the food and stimulants ordered for one patient are taken by another. For example, a case of exhausting disease may languish, to the surprise and annoyance of the attendant, while a patient with acute rheumatic disease consumes the stimulants prescribed for the first-mentioned sufferer. It is difficult to perceive the superiority of a system of nursing which permits these abuses, to the injury of patients, the squandering of funds, and the chagrin of physicians and surgeons. The collateral effects, also, of apparent failure in the use of a remedy—which is not taken—are worth considering.

YELLOW FEVER.

THIS is, we may hope, almost the last bulletin that will be published in connexion with this appalling epidemic. Eleven new and 143 old cases were reported as having occurred during the week ending November 9th at New Orleans. No new cases having occurred during the previous

twenty-four hours, quarantine was "raised"—(we suppose this means relaxed or removed)—on the 5th inst. There were 8 cases and 3 deaths in Morgan city, 35 cases and 9 deaths in Mobile, 7 cases and 1 death in Pass Christian, and 4 cases, but no deaths, at Ocean Springs. At Vicksburg, during the past week, there were 11 deaths, but none during the previous twenty-four hours. We need not recapitulate further; but enough is recorded above to indicate that the epidemic is generally on the decline. Meanwhile the Surgeon-General and his staff have a heavy task before them, not only in collecting the pure statistics of the outbreak, but in gathering together the threads of etiology, infection, and other aspects of causation that will be so interesting and useful to all sections of the medical profession.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

THE lectures for the year 1879 will be delivered as follows:—The Gulstonian lectures, by Dr. Curnow, on "The Lymphatic System and its Diseases," on March 7th, 12th, and 14th; the Croonian lectures, by Dr. Stone, on "Some Applications of Physics to Medicine," on March 19th, 21st, and 26th; and the Lumleian lectures, by Dr. Bristowe, on "The Pathological Relations of the Voice and Speech," on March 28th, April 2nd and 4th.

MANCHESTER ROYAL INFIRMARY.

THE Infirmary Board have decided to entirely remodel the out-patient and accident department of the hospital, and have accordingly set about the erection of a one-storeyed building in the rear of the present erection, which, besides affording accommodation for the dispensary and out-patients, will provide a ward containing thirty-two beds. This will enable the Board to pull down one of the present sheds, which has for the last few years added to the ugliness and utility of the town. The cost of the new building is estimated at between £3500 and £4500.

SCHOOL-SHIPS.

THE Lords of the Admiralty have permitted the *Mount Edgecumbe* training ship to be included on the list of those from which boys may be taken into the navy. We have remarked before that, as a *quid pro quo*, the authorities at Whitehall should have some direct means of judging whether the sanitary regulations and arrangements on board these ships are such as to justify the opinion that all is done to promote health, and to prevent the spread of contagious or infectious diseases. For example, is the *Mount Edgecumbe* school-ship provided with any hospital accommodation ashore or afloat? We think not.

THE PROFESSION IN COURT.

THE Gooch case brought into prominence the extremely confidential relationship which often exists between patients and their medical attendants, and the very difficult course which a doctor not unfrequently has to steer between professional secrecy on the one hand and public duty on the other. Both Mr. Teevan and Dr. Laking are to be congratulated upon having so ably sustained the honour of their profession under circumstances which were exceptionally embarrassing.

THE HAMPSTEAD HOSPITAL AGAIN.

THE inquiry with regard to the Hampstead Small-pox Hospital has again been resumed by the action of "Sir Rowland Hill and others *v.* the Metropolitan Asylums Board," which is as we write being tried in the Exchequer Division before Mr. Baron Pollock and a special jury. We abstain this week from comment on the case.

WE regret to record the death of Dr. Quin, who was many years known as the physician to the Duchess of Cambridge. The deceased gentleman graduated at Edinburgh in 1820.

THE honour of knighthood has been conferred on Dr. James Salmon, Inspector General of Hospitals and Fleets.

THE *Pharmaceutical Journal* of the 23rd mentions no less than twelve varieties of oils prepared from the eucalyptus.

Dr. HENRY M. JONES has been appointed Professor of Midwifery in Queen's College, Cork.

PROFESSOR BOTKINE has been elected President of the Society of Russian Physicians.

THE REVISION OF THE MEDICAL COUNCIL.

I.

THE month of November is a favourable time for saying anything in the way of a practical contribution to the legislation of the approaching year. Since the creation of the Medical Council there has been no moment so fit as the present for directing the attention of statesmen and of the profession to the Constitution of this body; to its Powers; to its Work; to its Cost; and to any suggestions for change in its composition which we may have to make, or which have been made by others. We are the more free to do this as twenty years have elapsed since its formation; and still more so as, for ourselves, at the time of its formation, we accepted the constitution of the Council, not as perfect, but as a thing to be tried. It has been tried. More than this, it has been found wanting. By its own confession it needs revision; and its own Executive Committee is, we may hope, at the present moment deeply engaged in considering the changes required. It is true that at its recent meeting the Council declined to pledge itself to meet early enough in the year to make its promised report to the Government. But this does not bind the Council not to meet. It may by this time have repented of the resolution which conveyed to so many the impression of apathy and unfaithfulness. Be this as it may, it is the duty of those outside the Council to direct the attention of Government to this question, which alone stands in the way of a great improvement in the medical education of this country, and of the means by which it is tested. It is unnecessary to point out to the Government how this question blocks the way. The earnestness of the profession in reference to it has been shown by the successful opposition which has been offered to two Bills, brought in by two strong Governments, representing respectively the two great parties of the State. These Bills, though far from providing satisfactorily for the creation of three Examining Boards, one for each division of the kingdom, contained much that was satisfactory to the profession. But, inasmuch as they ignored the constitution of the Council, they were met with firm resistance. If this resistance was justifiable in the case of Lord Ripon's Bill, *a fortiori* it was so in the case of the Duke of Richmond's, for the reason that this latter Bill adds to the duties of the Medical Council, and in a way to call for its reconstitution. The duty of regulating the education of dentists and of midwives, and of registering them, cannot with reason be devolved on a Council which does not contain a dentist or an accoucheur. We cannot doubt that his Grace the Duke of Richmond will easily be convinced of the importance of taking the present opportunity of adapting the constitution of the Medical Council to its new duties, and of making it more fit to discharge duties which it was mainly created to discharge, but which up till now

have been unfulfilled. It would be odd indeed if a statesman should refuse to undertake a change asked for by the whole profession, and apparently indicated by the Medical Council itself.

Without further preface, we propose to consider, in two or three articles, the Reform of the Medical Council. We shall begin by considering—

THE EXISTING CONSTITUTION OF THE COUNCIL.

The Council consists of the representatives of Universities, of Corporations, and of the Crown. These amount to twenty-three in number. Besides these it has the power of selecting a chairman, either from its own ranks, or from the outside; when it chooses from the outside the number of the Council is twenty-four, as at present. The essential number of the Council, however, is twenty-three. The following are the representative relations of the twenty-three members:—

Medical and Surgical Corporations ...	9
Universities	8
Crown	6

The medical and surgical Corporations are thus seen to be the predominant element in the Council. It may be said that these bodies are the real medical bodies, and best represent the profession. But it is above all things necessary, in order to an understanding of the working of the Medical Council, to recognise the very qualified sense in which these bodies represent the medical profession, and the nature of their claims to be represented in the Medical Council. They have the claim of bodies which have long examined students for licences to practise. They have the strong disqualification of bodies which have a great pecuniary interest at stake. More or less stringency in their examinations means more or less grist to the mill. And for what is virtually a State examination such a condition of matters is very unsatisfactory. If we are charged with unreasonableness in making such an objection we need only refer to notorious facts which show the eagerness of examining corporations to make money by easy gifts of their licences. If this reference is not sufficient it will be enough to say that both in the Medical Council and in Parliament the complaint has frequently been made that the students properly rejected at one examination find it easy to migrate to another part of the kingdom, and to pass a corresponding but easier examination there. We have another statement to make, however, in support of our objection to the large representation of Corporations in the Council. It is this—that for the twenty years of the Council's existence every proposal affecting the education or examination of students has had to be viewed from the standpoint of the interest of nine Corporations, which are represented by nine members. This has led to waste of time, waste of money, and to much delay in perfecting the common examinations of the different parts of the country. We think this statement will not be denied by anyone who has watched the discussions of the Council.

The Corporations have another disqualification for the strong position they have in the Medical Council. They represent the cliques and divisions of the profession. Whatever may be the need for division of labour in the higher departments of practice, union is the want of the profession, and unity and thoroughness are wanted in study, in education, in examinations, for the body of the profession. Public opinion has already done much to abolish the narrowness of the examinations of the different Corporations. The Medical Act, too, has done much. But we have still too much representation in the Council of the old strifes and divisions of the profession—too much of the Corporations that represent these. They want to be fused together to represent Medicine in its entirety, instead of, as at present, in its sections. As a preliminary to this, it would be an admirable piece of reform to require the various Corporations to combine together to elect a joint representative of all the Corporations. If the three Corporations of England, Ireland, and Scotland, respectively, were to join in this way, we should thus reduce the Corporation representation in the Council from nine to three.

REPORT OF THE LOCAL GOVERNMENT BOARD.

II.

THE principal event of the Local Government Board's administration during 1877-78 was the issue of a Code of Model Bye-laws. These bye-laws were considered by us at the time when they were first issued. The present Report contains some interesting information as to the operation of bye-laws previously issued by the Board for the sanitary regulation of hop-pickers. These bye-laws have not been adopted in the hop-districts so widely as the Board could have wished, but wherever they have been put in force, Mr. Wodehouse, one of the Board's inspectors, reports, the sanitary condition of the hop-pickers has been much improved.

As to the operation of the Alkali Acts, Dr. Angus Smith, the chief inspector of alkali works, reports "that the quantity of damage caused by the noxious gases evolved in manufacturing processes has steadily declined" since the Acts came into operation. But notwithstanding this improvement, complaints are still frequent that crops and cattle suffer from these works, from the smelting of copper ores and other manufacturing processes, and the Board observes that "the need of a comprehensive enactment for subjecting to Government inspection all manufacturing processes in which pernicious or offensive gases are evolved seems to be indicated."

The most interesting and important part of the Report to the medical profession is, perhaps, that which relates to public vaccination. The returns would appear to have been completed for the year 1875, and the results show that in that year the births of 850,354 children were registered according to the returns of the vaccination officers. Of these children nearly 85 per cent. (84·9) had, at the time of closing the returns, been registered as successfully vaccinated; about 10 per cent. (10·2) as having died early and unvaccinated; and an utterly insignificant fraction (about one in 25,000) as having contracted small-pox before they could be vaccinated. Thus 95 per cent. of the children whose births were registered in 1875 were, at the beginning of 1877, finally accounted for on the vaccination register, and of these the children that were still living were protected against small-pox. Of the 5 per cent. which remain, a small fraction—not quite 1 per 1000—were entered in the vaccination registers as "insusceptible of vaccination," the attempt to vaccinate them having been three times unsuccessfully made—an entry which is also final in one sense as exempting the parents from any further liability to penalty under the Vaccination Acts, but by no means final as regards the children's liability to small-pox, which, until the vaccination shall have been successfully done, remains as great as though the attempt to vaccinate had never been made. The register further contains, it would appear, an account of cases, amounting to two-thirds per cent. of the year's births, in which vaccination was temporarily postponed on account of the child's state of health. The proportion of the year's births of which there is no account is slightly over 4 per cent. (4·04), the large majority of them being cases which on account of the removal of the parents since the registration of the birth, the vaccination officers were unable to trace, or the certificate had not been registered.

"These returns," says the Report, "must be regarded as very satisfactory, and as testifying to the pains bestowed by

boards of guardians and their officers generally throughout the kingdom in the administration of the Vaccination Acts; but the number of children unaccounted for would have been still smaller than it is but for the special deficiencies in some particular Unions." What follows is of special interest with reference to the prevalence of small-pox in the metropolis.

"We had in our last Report," write the Board (the italics are ours), "*to express our regret that the Vaccination Acts had been less efficiently administered in the metropolis than in any other of the registration districts of England.* We pointed out that, in 1874, while the proportion of births unaccounted for on the vaccination registers was for the whole kingdom, exclusive of the metropolis, only 3¼ per cent., it was in the metropolis 7¾ per cent. During the year to which the present return relates (1875), the difference was still more marked; the proportion unaccounted for in the kingdom, exclusive of the metropolis, had diminished to 3·3 per cent.; in the metropolis it had increased to upwards of 8 per cent. The number of births registered in the metropolis in 1875, which were not accounted for on the vaccination registers, was upwards of 10,000.

"It is not, then, at all surprising that in the epidemic of small-pox which broke out in London in the autumn of 1876, and is only just terminating, there should have died from the disease a large number of young children. In the seven quarters during which the epidemic lasted, the deaths from small-pox in children under five years of age amounted to 1198. Of these, 458, or considerably more than one-third, were under one year of age, a large proportion of whom, no doubt, contracted their small-pox below the age which brought them within the compulsory provisions of the Vaccination Acts; but of the 740 between the ages of one and five years, all (with possibly a rare individual exception) may be looked upon as the victims of neglect."

At the beginning of the epidemic in the autumn of 1876 the Local Government Board took measures to arouse the metropolitan vaccination authorities to a more active exercise of their duties. This admonition, coupled with the alarm felt at the re-awakened activity of small-pox, gave rise to a spirit of exertion on the part of the authorities to clear off arrears of vaccination and to look more closely after births. But the general result, although in the end putting the young children of the metropolis, on the whole, in a better state of vaccination than they had ever been before, had mainly the result of proving "the extreme difficulty which attaches and must attach to dealing effectually with accumulated arrears in a vast aggregated population such as that of London"—a difficulty which renders it of the more importance that current births should be promptly dealt with. Notwithstanding the short lesson of the epidemic, the measures taken by the vaccination authorities of the metropolis for the better vaccination of their districts are stated by the Local Government Board still "to fall short of what we hold to be necessary for efficiency." Add to this that the Board warns the metropolis that it must, under present circumstances, look for another epidemic of small-pox in two or three years.

The medical inspections proper, made under the Board's instructions in 1877, seem to have reached almost the point of vanishing. Of medical officers of healths reports transmitted to the Board there were 1302, many of which, it would appear, were by no means creditable to the reporters. We think that the Board should have given some information as to the relation of the imperfect reports to the scale of pay of the reporters.

There would appear to be a growing desire on the part of sanitary authorities to provide themselves with hospital accommodation for infectious diseases. With regard to the registration of infectious diseases, the Board says much careful consideration will be required before a general measure can be framed; meanwhile the experiments in progress in this regard at Huddersfield and Bolton are being carefully watched. A further instalment of Dr. Ballard's report on effluvium nuisances is promised in Dr. Seaton's forthcoming report. Finally, the Board observes of its own work that, "as regards the organisation of the central department, the establishment of local sanitary authorities, the consolidation of the law, and the framing of bye-laws, the work may be said to be complete; what now remains, at least for the present, is to encourage, instruct, and guide the local authorities in the discharge of their responsible duties." Why the two processes should not have gone on step by step together does not appear.

ST. THOMAS'S HOSPITAL.

AT a General Court of Governors of St. Thomas's Hospital, on November 22nd, the treasurer, Mr. Alderman Stone, moved a resolution, "That the governors of the hospital adopt the principle of admitting paying patients into wards to be appropriated for that purpose, and that it be referred to the General Committee to prepare a scheme for the sanction of the Charity Commissioners in order to carry that resolution into effect." The treasurer enlarged upon the benefit of such a course to a large number of persons of the middle class, and stated that it would also, no doubt, add to the income of the hospital. St. Thomas's Hospital had to pay £2700 per annum in rates, a sum which would enable them to open two additional wards for the poor if they had the money. The intention was to raise money by paying patients, to enable them to open more of the general wards. He suggested that for the general wards for paying patients, the charge should be £2 2*s.* a week; in rooms where there was greater privacy £3 3*s.* a week; and in others £4 4*s.* It was believed that an income of £3000 might be realised by this means. In the discussion upon the proposition, which was very generally accepted, it was pointed out that there were two great objections. The one, that the block which it was proposed to utilise for the purpose is that known as the "fever-block," into which all cases of infectious disease arising in the hospital are now removed, together with other cases from without; that the abolition of such a use would take away one of the most valuable fields of study, and might also be unsafe. The other objection made was that the staff would have greatly increased work with no proportionate increase of salary. It was thought, however, that these difficulties might be surmounted, and the scheme was adopted by a large majority.

POST-MORTEM EXAMINATIONS IN WORKHOUSE INFIRMARIES.

To the Editor of THE LANCET.

SIR,—While I sincerely sympathise with Dr. Dowse in the difficulties he has experienced in making post-mortem examinations on the bodies of paupers, I am sure he will be glad to learn that there are Boards of Guardians in the metropolis that are free from the ignorant prejudices which threw so many obstacles in the pathway of his pathological researches.

During the five years that I have been the medical superintendent of the Chelsea Workhouse Infirmary and the medical officer of its workhouse, I have in no single instance met with any opposition from the Board in making any investigation I have wished on the body of any pauper dying within our walls, and I have availed myself of the opportunities which have been presented. But I have always—in every instance—carefully consulted the friends of the deceased, if such could be found, and by these I have, in several instances, been refused, and an examination has consequently not been made. But these have formed the exceptions rather than the rule.

So far from throwing impediments in my way, I have to thank the Chelsea Guardians for a suitable post-mortem room, fitted with all the necessary appliances, which has been erected contiguous to the infirmary, so that bodies intended for post-mortem examination may be conveniently placed therein instead of being removed to the ordinary mortuary within the precincts of the workhouse.

I am led thus publicly to eulogise the intelligent and enlightened action of my own Board for one reason only—because I know from experience how constantly the law of precedent is appealed to in this as in other public services when privileges are asked from the authorities.

I can hardly see how the Central Board can assist except by giving the medical officer discretionary power in the cases of unclaimed dead where there are no friends or relatives to consult, for since poverty is not a crime, it would scarcely be

harmonious with that liberty of the subject which our laws so rigorously protect to permit an arbitrary authority to be exercised over the bodies of those whose friends, however shortsightedly, would feel their natural rights outraged by the interference.

I am, Sir, yours faithfully,

WILLIAM HENRY NETHERCLIFT.

Chelsea Workhouse Infirmary, S.W., Nov. 26th, 1878.

THE CYPRUS INVALIDS AT NETLEY.

WE have been favoured with the following concise but interesting notes of the clinical history of five of these cases:—

CASE 1.—Private S——, aged twenty-four, served in Malta four years; had good health there, and landed in Cyprus in the same state on July 23rd, 1878. On Sept. 12th he was suddenly seized with headache, dorsal pain, and vomiting, which continued until the 17th, after which he got better. On Oct. 1st was again attacked with the same kind of symptoms, and remained ill until he embarked for England on Oct. 8th. Suffered only from weakness during the voyage. The preceding account is condensed from his own statement. Arrived at Netley on Nov. 9th. On the 10th, at 10 A.M., he had an attack of ague, the cold stage lasting three hours, and passing immediately into the sweating stage, which also lasted three hours. Temperature during the height of paroxysm reached 104·2°; pulse 128. Does not consider the Cyprus fever to be of the same kind as that which he has had at Netley. Is now nearly convalescent.

CASE 2.—Private G——, aged twenty-five, had served in Malta three years and a half when he was sent to Cyprus. His only sickness in Malta was for fourteen days in 1875, and he was in excellent health when he landed in Cyprus on July 22nd, 1878. A week after arrival he fell ill. Symptoms: Giddiness, vomiting, thirst, heat, loss of appetite, and pain in head and back. Had no shivering at that time. During convalescence, about twelve days after this attack, he was seized again with similar symptoms. About Sept. 10th was removed to Larnaca where he was attacked for the third time. He was sent home on Oct. 13th; had no fever during the voyage, and arrived at Netley on Nov. 9th. The foregoing is gathered from his own statements. On the 12th he had a decided attack of ague. The cold stage began at 5 P.M., and lasted about half an hour. The hot and sweating stages lasted together about two hours. On the 13th he had another paroxysm, the cold stage of which began at 8 A.M., and lasted the hour. The hot and sweating stages together lasted about two hours. Had slight bronchitis also at this time. He thinks his first three attacks of fever were of a totally different kind from the last two. Has had no fever since the 13th, and is now convalescent.

CASE 3.—Private C——, aged thirty-nine, served in India from 1860 to 1865. Went to the Mediterranean in 1868, and was sent from Malta to Cyprus in July last. Was in perfectly good health when he left Malta, and also when he landed. In the beginning of September he was taken ill after great exposure to the heat, suffering from pain in head and back, heat, and dryness, but no marked shivering. This lasted seven days. Had a similar attack three weeks later, when it lasted four days. At the beginning of October he had an attack of ague, and he says he knew *this* fever to be ague from his Indian experience, having suffered from it there in 1863. Had three or four such attacks before he left Cyprus on the 30th October. Had one or two attacks on the voyage. Was admitted on the 9th at Netley, and had decided ague on the 10th and 11th. In Cyprus, he says, the cold stage used to last from a quarter of an hour to two hours, and was followed at once by sweating. At Netley his attacks were slight, the cold stage lasting about one hour, the hot stage about one hour, and the sweating stage about half an hour. Has had no fever since the 11th. He is very sallow and anæmic, and has some hepatic enlargement, but is recovering rapidly.

CASE 4.—Sergeant M——, aged twenty-seven, a very intelligent non-commissioned officer, states that he served in the Ashanti expedition in 1873–74, and after returning thence to Portsmouth suffered from ague. Went to Malta in 1874 and had good health there. Went from there to Cyprus, where he landed on the 23rd of July last. Continued in good health until about the middle of August, when he was attacked with what he calls "Cyprus fever" (characterised by giddiness, vomiting, heat, thirst, and pain in back and limbs), which lasted about eighteen days. He then returned to duty, but after the lapse of about a fortnight had another attack of fever, which differed from the first by beginning with shivering. This attack reminded him of the ague that he had had after returning from the Gold Coast. This fever did not cease, but kept returning every other day or every two days, and the recurrences were not marked with rigors. He was invalided home, but ceased to have fever after he left Malta. Arrived at Netley on November 9th, when he had an attack of ague, the cold stage lasting one hour, the hot stage half an hour. On the following day he had another attack, which began at 2 P.M. His fever-chart runs thus:—

		10 A.M.		6.30 P.M.
Nov. 11th.	Temperature	98·6°	.....	101·6°
,, ,, ...	Pulse	100	.....	130
,, 12th.	Temperature	99°	.....	102°
,, ,, ...	Pulse	100	.....	120
,, 13th.	Temperature	99·4°	.....	103·4°
,, ,, ...	Pulse	104	.....	120
,, 14th.	Temperature	101·4°	.....	101·8°
,, ,, ...	Pulse	120	.....	120
,, 15th.	Temperature	97·5°	.....	103°
,, ,, ...	Pulse	100	.....	120
,, 16th.	Temperature	99·6°	.....	—
,, ,, ...	Pulse	100	.....	—
,, 17th.	Temperature	98°	.....	97·8°
,, ,, ...	Pulse	—	.....	96
,, 18th.	Temperature	98°	.....	98·2°
,, ,, ...	Pulse	84	.....	88
,, 19th.	Temperature	98°	.....	—
,, ,, ...	Pulse	90	.....	—

He thinks his disease in Cyprus was of the same kind throughout, but that it was much more severe in Cyprus than it has been at Netley. Is very anæmic, and has enlargement of the liver and spleen, but is improving rapidly. Treated at Netley by full doses of quinine (twenty grains).

CASE 5.—Private R——, aged twenty-three; in the service five years. Had served in Malta four years, but was never ill there. Landed in good health in Cyprus on July 22nd last. At the beginning of August he had his first attack of fever (symptoms: loss of appetite, thirst, heat, pain in head and back, with vomiting), which lasted ten days. He then did duty for a week, but had to return to hospital on account of another attack, and was subsequently sent home, as he did not get better. He thinks it was in the early part of September that he first began to suffer from "ague," and he considers the ague a totally different fever from that which he suffered from at first. He arrived at Netley on Nov. 9th, and had a decided attack of ague at 7 P.M., when the cold stage lasted three-quarters of an hour, and at once terminated by a sweating stage, which was trifling in duration. On the 10th he had another attack, when the cold stage lasted one hour, and the hot stage half an hour. Has had no attacks since. He also had a slight bronchitis on the 10th, which has since subsided. His anæmia on admission to Netley was intense, but he is rapidly regaining colour and strength.

All these men are progressing fairly well towards recovery except some two or three, whose cases are complicated with other maladies, chiefly dysentery, contracted for the most part in India and the Atlantic.

At the conclusion of the article we are, of course, naturally impelled to the consideration of what could have been done (if anything) to prevent that large percentage of sickness which in presence of an enemy would have had such terribly serious results. Is it possible that the authorities, combatant and civil, either or both, were entirely ignorant of the facts—(1) that at certain seasons of the year malarious fevers are common in Cyprus; (2) that in certain parts and also at certain seasons, green food fit for human consumption is not abundant; and (3) that animal food was bad? We are, of course, perfectly aware that these circumstances continually exist in connexion with an invading force. But having regard to the fact that in this instance we were not invading a hostile country, but occupying a friendly territory where we expected to be (and were) cordially wel-

comed, was it not natural to suppose that, with an abundance of means and appliances at command, some special care would be taken to keep the handful of men sent in good sanitary condition? We think so, and have already indicated, in no uncertain phraseology, upon whom, in our opinion, the responsibility rests.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Nov. 21st:—

Adolphus, Theodore Fredk. Pennington, Lyndhurst-road.
Barker, Fredk. Rowland, Aldershot.
Culling, William Robert, Thornhill-crescent.
Gayton, Francis Carteret, St. Mary's-terrace, Paddington.
Vinrace, John Hinks, Hockley, Birmingham.

The following gentleman on the same day passed the Primary Professional Examination:—

Harwood, John Gassen, St. Bartholomew's Hospital.

THE Will of the late Dr. James R. W. Vose has been proved by his widow, in the Liverpool District Court of Probate, under £90,000.

P. DOWNING HOPGOOD, Medical Officer of Health, has been awarded £8 6s. for successful vaccination in his district, No. 1, Stow-on-the-Wold.

MR. DAVID HARTLEY, M.R.C.S. Eng., who was house-surgeon of the Cheltenham Hospital for about forty years, has been awarded an annuity of £150 per annum, upon resigning from ill-health and the infirmities of age.

BEQUESTS TO MEDICAL CHARITIES.—The Stroud Hospital has become entitled to £1500 under the will of Miss Jane Gregory. Mrs. Dauntesey Foxton, of Pendlebury, bequeathed £1000 each to the Manchester Royal Infirmary and the Barnes Convalescent Home. Mr. Henry Hewitt Kennard, of Rockcliffe, Milford, Southampton, bequeathed £300 to the Brompton Hospital for Consumption and Diseases of the Chest, and £200 to the Earlswood Asylum for Idiots. The Northampton General Infirmary has received £200 under the will of Mr. C. J. Slye, of West Haddon. The Birmingham and Midland Counties Sanatorium has become entitled to £100 under the will of Mr. M. R. Griffin. Mr. Thomas Ball bequeathed £100 to the Nottingham General Hospital.

Medical Appointments.

ARCHER, R. S., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the North Everton District of the West Derby Union, Lancashire, vice Rowland, deceased.

BACON, T., M.D., C.M., has been appointed House-Surgeon to the Great Grimsby and District Hospital, vice Robins, resigned.

DAVIDSON, A. D., M.R.C.S., L.S.A., has been appointed Ophthalmic Assistant to St. Thomas's Hospital.

EVANS, J. H., M.R.C.P.Ed., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Litherland Urban Sanitary District, Lancashire, at £15 15s. per annum, vice Sprakeling.

FIRTH, C., F.R.C.S.E., M.B., has been appointed Assistant-Surgeon to the Norfolk and Norwich Eye Infirmary, vice Robinson, resigned.

GRAY, J. H., M.B., M.R.C.S., L.S.A., has been appointed Resident Medical Officer to the Wandsworth-common Provident Dispensary.

HADDEN, W. B., M.B., M.R.C.S., has been appointed Assistant House-Physician to St. Thomas's Hospital.

HASLAM, G. H., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the No. 1 or Drayton District of the Drayton Union, Salop, vice Meek, deceased.

JONES, V. D. W. B., L.R.C.P.Ed., M.R.C.S.E., has been appointed Certifying Factory Surgeon for Llanboidy, Carmarthenshire, vice Crosswell, deceased.

LEGG, J. W., M.D., has been appointed an Assistant-Physician to St. Bartholomew's Hospital, vice Gee, appointed a Physician.

LYDDON, C., L.R.C.P., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the East Oldbury District, and Public Vaccinator for the Township of Oldbury and Parishes of Warley Salop and Warley Wigorn, West Bromwich Union, vice Sainsbury, deceased.

MCMILLAN, D., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Parishes of Kilcalmonell and Kilberry, Argyllshire, vice Campbell, deceased.

MERSON, J., M.D., C.M., has been appointed Medical Superintendent of the Borough of Hull Lunatic Asylum, at £350 per annum, house, &c., vice Wallis, appointed Medical Superintendent of the Lancashire Lunatic Asylum, Whittingham.

NEAL, J. B., M.R.C.P.Ed., has been appointed Resident Medical Superintendent of Wandsworth and Clapham Infirmary.

PAIN, T. D'Oyley, L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Stratford District of the Samford Union, vice Pink, resigned.

ROBERTS, J. G., L.R.C.S.Ed. & L.M., L.R.C.P.Ed., has been appointed Medical Officer for the newly-formed No. 9 District of the Hexham Union.

ROBINSON, H. S., M.R.C.S.E., L.S.A.L., has been appointed a Surgeon to the Norfolk and Norwich Eye Infirmary, vice Firth, deceased.

SANDWITH, F. M., M.R.C.S., L.R.C.P., has been appointed Resident Accoucheur to St. Thomas's Hospital.

SANKEY, A. O., L.R.C.P., L.R.C.S., has been appointed House-Physician to the Royal Infirmary, Glasgow.

SCHOFIELD, J., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Dukinfield Urban Sanitary District, Cheshire, at £35 per annum, vice Galt, deceased.

SHEPPARD, C. E., M.R.C.S., L.R.C.P., has been appointed House-Physician to St. Thomas's Hospital.

SHOOLBRED, W. A., M.R.C.S.E., L.S.A.L., has been appointed Certifying Factory Surgeon for Chepstow, vice White, resigned.

SMITH, R. P., M.R.C.S., L.R.C.P., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

STREETEN, F. E., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Kirkleatham District of the Guisborough Union, vice Wilson, resigned.

WHITE, P. H., M.B., has been appointed Assistant-Surgeon to the City Provident Dispensary and Surgical Appliance Association, Aldersgate-street.

WRIGHT, T. P., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Bingham Rural Sanitary District, and Medical Officer to the Bingham Union Workhouse, vice Eaton, resigned.

Births, Marriages, and Deaths.

BIRTHS.

DE LA COUR.—On the 22nd inst., at Camden-road, the wife of George F De la Cour, M.D., of a daughter.

DEWAR.—On the 20th inst., at Kirkcaldy, the wife of William Husband Dewar, L.R.C.S.Ed., of a son.

HARRIES.—On the 17th inst., at Aberystwith, the wife of Thomas Davies Harries, F.R.C.S.E., of a daughter.

PHILPOTS.—On the 17th inst., at Parkstone, Dorsetshire, the wife of John Richard Philpots, L.R.C.P.Ed., of a daughter.

ROCHE.—On the 20th inst., at Grand Parade, Cork, the wife of Charles H. Roche, L.R.C.S.I., of a daughter.

STEVENS.—On the 26th inst., at High-street, Stoke Newington, the wife of A. Felix Stevens, M.D., of a daughter.

WRIGHT.—On the 14th inst., at Wellingborough, the wife of Joseph Brampton Wright, M.D., of a son.

MARRIAGES.

COOPER—RAWLINSON.—On the 25th inst., at St. Nicholas, Yarmouth, John Nield Cooper, M.R.C.S.E., to Ada, daughter of the late T. L. Rawlinson, Esq.

FRAZER—POOLEY.—On the 26th inst., at All Saints, Norfolk-square, William Frazer, M.D., to Marion Augusta, daughter of the late T. Pooley, Esq.

DEATHS.

BALMFORTH.—On the 19th inst., at Silcoates, Yorkshire, Joseph Balmforth, M.R.C.S.E., aged 44.

BOLTON.—On the 23rd inst., at Cheltenham, David Bolton, F.R.C.S.E., late of Clifton, aged 72.

GODFREY.—On the 2nd inst., at Lancaster, William Godfrey, L.R.C.S.Ed., aged 40.

GOWING.—On the 24th inst., at Salisbury, Catherine, wife of B. C. Gowing, M.R.C.S.

NOEL.—On the 20th inst., at Upper Tooting, David Cole Noel, L.R.C.P.Ed., aged 58.

QUIN.—On the 24th inst., at Queen Anne's Mansions, Frederick Foster Quin, M.D., aged 79.

TIBBITS.—On the 21st inst., at Pembroke-road, Bristol, Robert William Tibbits, M.B., aged 26.

TUOHILL.—On the 25th inst., at Merrion-square West, Dublin, Richard Tuohill, M.D.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages and Deaths.*]

BOOKS ETC. RECEIVED.

Transactions of the Pathological Society of London. Vol. XXIX.
Bulletins et Mémoires de la Société Médicale des Hôpitaux de Paris.
Dr. B. W. Richardson on Total Abstinence.
Dr. H. Schwartze: The Pathological Anatomy of the Ear.
Dr. B. Lœwenberg: Les Tumeurs Adénoïdes du Pharynx Nasal.
Dr. T. M. Rotch: Absence of Resonance in the Fifth Right Intercostal Space.
Dr. F. W. Pavy on Points Connected with Diabetes.
J. C. Harris: The Southern Guide to the Hot Lake District of the North Island of New Zealand.
Dr. W. Bodenhamer: An Essay on Rectal Medication.
Dr. W. H. Barlow on Regressive Paralysis.
Christmas Number of the Quiver.
Social Notes. November.
Leisure Hour. December.
Sunday at Home. December.

THE POOR-LAW MEDICAL OFFICERS' MEMORIAL.

To the Editor of THE LANCET.

Local Government Board, Whitehall, S.W.,
12th November, 1878.

SIR,—I am directed by the President of the Local Government Board to state that he has had under his consideration the memorials which have been addressed to him by the Poor-law medical officers on the subject of Poor-law Medical Relief Reform, and to request that you will inform the memorialists that he has not failed to give his best attention to their representations.

The memorials, though separately signed, are identical in character, and they may, therefore, for the purpose of the present communication, be treated as a joint document; but, at the same time, it should be observed that a few medical officers have expressed their dissent from some of the proposals which the memorials contain.

The matters referred to by the memorialists, and which in their judgment call urgently for reform, are six in number, and it will be convenient to notice them in the order in which they occur, merely premising that some of the propositions are not sufficiently definite to enable the President to collect the precise change which is sought.

1. By the first proposal it is contemplated that the Poor-law medical service should receive an organisation as complete and independent, as self-contained, and direct in its relation with the central Government as that accorded to the Army Medical Department, and that medical officers in a district, though still appointed by the local authority, should, when so appointed, become servants of the Local Government Board in fact as well as in name.

With regard to this proposal, which it is needless to say would effect a grave and extensive change, it is difficult to perceive any analogy between an organised State service and that to which the Poor-law medical officers belong. The army medical officers are exclusively servants of the State, and are controlled by a complete system of Government supervision. They are bound by very special conditions, must go wherever they are ordered, and are prohibited from engaging in private practice.

The Poor-law medical officers, on the contrary, are the servants of, and appointed by, a local authority, from whom they receive their directions, and whose reasonable orders they are bound to obey. They cannot be removed from place to place, and in the intervals when not occupied in their public duties may dispose of themselves and their time in any way they think proper. It is evident, therefore, that the conditions of the two services are essentially different, and the President fails to see in what respects it would conduce to the public advantage if the Poor-law service were to receive an organisation such as that contemplated by the memorialists. It is to be borne in mind that Poor-law medical officers are, at the present time, in a certain sense subject both to the control and to the protection of the Government, being removable only by this Board, and not by the guardians. The memorialists, however, by their proposal contemplate that the relation between the medical officers and their employers, the guardians, should be changed, and that the former in the discharge of their duties should no longer act in subordination to the guardians, but, in all respects, be placed under the control of the Board. This proposal is undoubtedly at variance with the policy of the Poor-law Amendment Act (4 and 5 William IV., cap. 76). That statute, while providing for a general central control, expressly leaves in the hands of the guardians, as the local authority, the administration of all relief to the poor (medical or otherwise), as well as the appointments of the officers needed for the purpose. It is manifest that this duty could not be effectually discharged by the guardians unless the persons appointed to assist in the administration of relief were subject to their direct orders. Nor in this respect can distinction be made between the officers who are engaged in giving ordinary relief and the officers whose duty is confined to attending to the wants of the poor in sickness. At the present time the medical officers look to the guardians for payment of their salaries, and, although a moiety of such salaries is in most instances repaid by the State, it is evident that, unless the entire charge were undertaken by the Government, the guardians could not be expected to relinquish the control which they now have over these officers. Indeed, so long as any portion of these salaries is defrayed from the local rates, such a concession would be altogether at variance with the principle of local self-government, and would be resisted to the utmost by the ratepayers.

The memorialists state that it is not essential that the medical officers should be appointed by the Central Board, but only that, being appointed, they shall become servants of the Local Government Board in fact as well as in name. It is not, however, correct to suppose that the medical officers are already in name the servants of the Board; and, if they are to become the servants of the Board, it is not easy to see how their appointment could properly be delegated to a local authority.

2. As regards the alteration suggested in the mode of adjusting the remuneration of medical officers, the President is not prepared to admit that, as a general rule, the services of medical officers are not at present regulated in a manner consistent with the principle of a sufficient remuneration. There are reasons which would render a fixed rate or governing scale of payment not only difficult of application, but undesirable. The circumstances of districts differ so widely that no considerations of area and population merely would enable a just decision to be arrived at in determining the salary to be assigned in any particular case, and a fixed scale based upon the average time occupied by the medical officer in the discharge of his duties, or upon the number of cases to which he might have to attend, would scarcely be conducive to the interests of the public. The facility with which, when the office of medical officer becomes vacant, competent medical men are found to fill the vacancy, affords a strong presumption that, on the whole, the remuneration is not deemed to be insufficient, or, at least, that there are circumstances attendant on these appointments which cause them to be eagerly sought after by the profession. At any rate these considerations often interpose a serious obstacle in the way of the central authority inducing boards of guardians to augment the salaries of medical officers in those cases where an increase appears to be required. It cannot be denied, however, that there are cases in which the salary is unduly low, and, as from time to time these cases are brought under the notice of the Board, such means as appear most expedient are readily taken with the view of placing the salaries upon an improved footing.

3. As regards proposition three, the President, whilst fully sensible of the advantages of the dispensary system under certain circumstances, is unable to satisfy himself that the suggested separation of the supply and dispensing of drugs from the duties of medical officers would, as a general rule, be practicable. The arrangement would necessarily involve the provision of dispensaries or stations for the storage of drugs, and the appointment of competent persons to dispense them; and although in large towns and populous districts the "dispensary system" is easily and usefully worked, in country districts, where the population is widely scattered, its application becomes so difficult as to be almost impossible. The cost, moreover, of providing qualified dispensers would be considerable. Where, however, the circumstances of the union admit of the guardians establishing a dispensary, or arranging for a supply of drugs to be kept at the workhouse or elsewhere, to be dispensed by their medical officers under proper restrictions, it is already the practice of the Board to encourage such an arrangement.

4. The President must dissent from the view expressed in the fourth proposition. He can see nothing in the nature of medical relief which requires it to be regarded as a matter distinct from the workhouse. On the contrary, the treatment which in sickness the poor receive in workhouses constitutes, in his view, one of the most valuable forms of medical relief. With a considerable portion of the population, indeed, it is the only mode in which, when overtaken by sickness, their medical needs can be adequately met. To most large workhouses spacious and well-appointed infirmaries, with competent nurses, are now attached, and in country districts the rooms set apart at the workhouse for the sick are, with few exceptions, of a suitable character. Having regard to the conveniences and appliances found in workhouse infirmaries at the present time, it does not admit of reasonable doubt that the treatment of the sick poor in them is superior to that which they can receive in their own often crowded dwellings.

Cottage hospitals, to which allusion is made, though useful institutions, being few in number, and not subject to official regulation, cannot be regarded as in any way affording a substitute for the present system of workhouse treatment in sickness.

5. The fifth suggestion appears to be in substance that the supply of necessaries for the sick should be under the control of the medical officers without the intervention of the relieving officer; that, instead of "recommending," the medical officer should be empowered to "order" what he considers necessary. To justify so important a change as that proposed, reasons of the most cogent character ought to be adduced; but the President does not observe that any such reasons have been stated by the memorialists. Under the existing regulations of the Board, the respective shares of medical and relieving officers in administering relief to the poor seem, at present, to be properly discriminated and apportioned. The function of the medical officer is to attend the poor in sickness, and to prescribe the treatment and medicines necessary in the case; the function of the relieving officer is, under the direction of the guardians, to supply such other relief as may be needed. The effect of substituting the authority of the medical officer for that of the relieving officer, as proposed, would be practically to withdraw from the control of the guardians a description of relief which, as it has a constant tendency to increase, requires to be most carefully watched. Nor are there any just grounds for believing that under existing arrangements the special needs of the poor in sickness, as regards extras or stimulants, are not adequately provided for, or that the reasonable recommendations of the medical officer in this respect are not duly attended to by the guardians and their officers.

It may be pointed out that the claim of medical officers to give imperative orders for the supply of stimulants or extra food or nutriment to pauper patients was strongly urged by various witnesses who gave evidence before the Parliamentary Committee of 1866. The Committee, however, came to the conclusion that the change sought was inexpedient, and reported that the leaving the distribution of such articles to the unchecked discretion of the medical officer would unquestionably increase the expenditure for the relief of the sick poor, and diminish to a serious extent the control and responsibility of the guardians.

6. As regards the suggestion that patients treated at home should be attended by paid nurses, the President may state that there is nothing at present to prevent the guardians supplying such assistance where, from the special circumstances of the case, they may deem it necessary, and he is desirous of encouraging this arrangement as much as possible. He fears, however, that the admitted difficulty of obtaining in rural districts the services of persons suitable for this duty would probably render impracticable for some time to come any general application of the system of paid nurses in the treatment of the poor at their own homes.

In conclusion, the President sees no ground for supposing that any practical advantage would result from the further inquiry suggested, whether undertaken departmentally or by means of a Parliamentary Committee. The system of Poor-law medical relief as established and administered under the regulations of the Board was carefully considered in all its bearings by the Committee, to which reference has been made. That Committee, however, so far from recommending any important change, reported, "That there are no sufficient grounds for materially interfering with the present system of medical relief, which was made the subject of special and lengthened inquiries by Select Committees of this House in the years 1844-1854."

The views of the Committee are more fully stated in the following passage in their Report, which may be cited with advantage:—

"Your Committee do not find that, under the existing system, any practical difficulty is experienced in securing the services of competent medical practitioners as union officers, and, looking to the large number of medical officers that are now employed to attend the sick poor, the progressive diminution in extent of districts inconveniently large, the care that has been taken to ensure the engagement only of properly qualified men, their augmented remuneration, and their improved status, arising from their tenure of office, and from other causes, your Committee believe that the system under which medical relief is administered has been greatly improved, and that the poor were never so promptly attended to or so effectually relieved during sickness as they are at the present time."

These views apply with additional force at the present time, inasmuch as the great improvement of which the Committee speaks has progressed steadily since 1864. Nor is there anything, as the President considers, to warrant the expectation that a different conclusion would be arrived

at now if the subject were again brought under the consideration of Parliament.

In conclusion, the President desires me to state that he regrets that he is unable to express more concurrence with the views of the memorialists upon the important points brought under his notice by them; and the more especially as a somewhat lengthened official experience has induced him to entertain a very high opinion of the meritorious manner in which the Poor-law medical officers as a body discharge the onerous and important duties which devolve upon them.

I am, Sir, your obedient servant,

JOHN LAMBERT, Secretary.

Notes, Short Comments, and Answers to Correspondents.

PROVIDENT DISPENSARIES FOR LEEDS.

AN influential meeting of persons interested in the medical charities of Leeds was held in the Board-room of the General Infirmary on the 20th inst., to consider the question of medical relief to out-patients, and the possibility of mitigating some of the evils of the present system by establishing district provident dispensaries in various parts of the borough. It was stated that between 40,000 and 50,000 cases of out-door medical relief are now treated annually in Leeds by the three principal medical charities of the town, out of a population of about 300,000. This, of course, takes no account of the pauper medical relief administered through the agency of boards of guardians. The number of out-patients of the Leeds General Infirmary has increased from 5141 in 1867, to 12,140 in 1877. The other institutions show a similar increase of out-patients, whose numbers have grown unmanageable. Dr. Heaton, Senior Physician of the General Infirmary, read a paper dealing thoroughly with the subject, in which it was pointed out that any provident dispensary successfully fulfilling the objects for which it is intended should command the hearty approval and co-operation of four classes—"of the managing boards and the medical officers of existing medical charities in the same district; of the general body of the medical profession practising in the district included in the operations of the institution; of the benevolent public; and of the class of operatives for whose benefit the work is undertaken." After a discussion, in the course of which the Mayor expressed his readiness to do what he could, in his official capacity, to further the objects of the meeting, an influential Committee was unanimously appointed to investigate and report upon the matter. As this Committee includes the Mayor and the Vicar of Leeds, in addition to such well-known names as Dr. Heaton and Mr. Wheelhouse, there seems every prospect of a practical and satisfactory result from this effort to deal with the growing evils of the out-door gratuitous medical relief system in Leeds. We shall watch with interest the further progress of this important movement.

Mr. Reizach should propose the inquiry to his medical adviser.

PLACENTA PRÆVIA.

To the Editor of THE LANCET.

SIR,—"Nelsonian," in a late number of your journal, states: "When called early, and finding extensive hæmorrhage going on, with a dilated os uteri, or dilatable sufficient to introduce my finger, my plan has been to rupture the membranes, which in most cases arrests all hæmorrhage, then deliver the patient by turning. Can anyone recommend a better mode of proceeding?"

The above remarks may mislead the inexperienced, as conveying the idea that rupturing the membranes arrests hæmorrhage in most cases of placenta prævia, which is not the case. Rupturing the membranes is the *golden* remedy for accidental hæmorrhage, which in most cases it will arrest; whereas in well-marked cases of placenta prævia the same proceeding, unless immediately followed by turning, or the separation of the placenta from its attachment to the uterus, would intensify the hæmorrhage.

The following would appear to me to be the proper rule of practice in cases of placenta prævia:—In the early stage, rest, anti-hæmorrhagic treatment, so as to moderate the hæmorrhage, and allow time for the os uteri to dilate; but if the hæmorrhage is profuse, and the placenta is completely over the os uteri, recourse must be had to turning with as little delay as possible. In cases where turning is impossible, from rigidity of the os uteri or some other cause, I would separate the placenta from its attachment to the uterus. This proceeding would lead to the death of the child, and should not be adopted unless in cases where the child is known to be dead, or in cases which do not admit of turning, and the life of the mother is in jeopardy. In some cases of partial placental presentation, rupturing the membranes will arrest the hæmorrhage, and the delivery may be completed without turning.

Yours &c.,

T. HUGHES, M.D.

Dinorwic Quarry Hospital, Llanberis, Nov. 18th, 1878.

Speculum.—The use of the sound cannot in all cases of disease in virgins be well dispensed with; but it generally can, and, when so, it ought not to be used. Its use is especially unjustifiable in cases where the objection named may be supposed to exist. It would be likely to do mischief.

An Invalid Doctor is thanked, but we have not space for his letter.

SHEFFIELD AND ITS MEDICAL OFFICER OF HEALTH.

IT is eminently satisfactory to find that the Local Government Board has distinctly informed the Town Council and the Urban Sanitary Authority for Sheffield that "they would not feel justified in authorising the repayment, out of the parliamentary grant, of a moiety of the salary of any medical officer of health for the Sheffield urban sanitary district, unless such officer were required to devote his whole time to the discharge of the duties of his office." This letter was discussed in a somewhat disorderly manner at a recent meeting of the Town Council, and a proposition that "the Local Government Board be informed that we are perfectly ready to take the responsibility (of such an appointment), and to pay the medical officer ourselves," was rejected in favour of an amendment to the effect, "that the letter be simply entered upon the minutes." We fear it is now too late to hope that the Sheffield Town Council will see that they will effect no economy by making a local practitioner their medical officer of health, and that in so large a town as Sheffield the bare idea of efficient sanitary supervision in combination with private medical practice is simply preposterous, bringing discredit upon local health self-government.

THE LATE MR. PHELPS.

To the Editor of THE LANCET.

SIR,—In your impression of last week I was surprised to find a letter from Mr. Arthur Galloway, assistant to Mr. Clegg, of Epping, greatly misrepresenting my notes of the illness of the late Mr. Phelps (sent by request), and reflecting upon the treatment of his case. I shall feel greatly obliged by your allowing me to correct these statements.

For some years I had attended the late Mr. Phelps, and up to October 17th, during his last stay at Epping, continued to treat him by correspondence. I had previously advised his family to call in a local practitioner if he became worse, which was done, and I was sent for by his family to consult with Mr. Clegg on the 20th, and to arrange for meeting Sir Wm. Jenner in consultation. As Mr. Phelps was then perfectly unconscious, and in a hopeless condition, it was considered unnecessary for me to see him again. During the last fortnight of his illness I saw him at Epping three times, and he was perfectly unconscious. His nephew, Dr. Phelps, also saw him on several occasions, and he only seemed to recognise him once. In my notes I said he occasionally recognised friends. I mentioned in my letter to you, Sir, that Mr. Clegg attended him at Epping; but I presume you considered the profession would only be interested in the details of the illness, and not in the names of all the attendants.

With respect to the reflections on my treatment, to quote Mr. Galloway's words: "His *last* illness was entirely brought on through mental exertions, and having to appear in public while in a weakened and nervous state, and it may be a warning to medical men not to allow professional men to resume duties requiring such severe mental strain whilst suffering as Mr. Phelps was during his last appearance on the stage."

Now I must say I fail to see how a gentleman, so recently qualified, who had never seen Mr. Phelps before, can make such a statement.

For many months previous to Mr. Phelps acting for the last time at the Aquarium Theatre in February last, he had not acted, excepting for a few days at Dublin and the Aquarium some weeks before. In February last he acted five times at the Aquarium, and having taken a chill, it developed itself into an attack of congestion of the brain. After some weeks' stay at Epping, he felt perfectly well again; but in my judgment his brain never recovered its full powers, but a gradual failure both of mind and body supervened, which (months afterwards) culminated in a semi-unconsciousness, with prostration during the three weeks preceding his decease.

I am afraid the country would be deprived of many of our foremost statesmen if such advice as Mr. Galloway suggests were always to be acted upon.

With regard to Mr. Galloway being present at the consultation, he is perfectly correct in bringing it to the notice of the profession. At the same time I may say that Mr. Clegg had been away for some days previous to the consultation, and in the meantime Mr. Galloway, as his assistant, had seen Mr. Phelps with a retired practitioner in the neighbourhood.

If any contradiction of my letter had been needed, I think it very improbable that Mr. Clegg would have left this duty to his assistant.

I am, Sir, faithfully yours,

Camden-road, N.W., Nov. 26th, 1878. G. F. DE LA COUR, M.D.

Dr. Fisher should make such a representation as he makes to us to the bodies whose diplomas are held by the registered author of the disgraceful advertisements referred to.

Mr. T. H. Tidswell, (Morecambe.)—The specimen is the pregnant female of a tick, *Ixodes*, or a very close ally. The animal infests men, horses, and other animals.

Dr. Allen Duke's paper will appear next week.

"A CASE OF DISTRESS."

To the Editor of THE LANCET.

SIR,—Allow me to thank you for your insertion in your journal of my late appeal. Through the kind response I have met with from several of your readers, I have been enabled to raise a sum of about £9 towards the alleviation of the distress of the poor family whose cause I pleaded. I trust that, through the help thus opportunely given, they may be enabled to go forward and prosper in their new position. As, however, further means are still necessary, may I be allowed to state that any contribution that may be afforded for this object will be most thankfully received and acknowledged by me, when I shall be only too glad to give such details as may be required.

I remain, Sir, yours faithfully,

J. JOHN HUNT,

November, 1878. Curate of St. Mary, Hornsey-rise, N.

THE USE OF THE FORCEPS WHEN THE OS UTERI IS PARTIALLY DILATED.

AT a recent meeting of the Dublin Obstetrical Society, Dr. George Johnston, ex-Master of the Rotundo Lying-in Hospital, read an interesting paper on the Use of the Forceps in that institution from 1868 to 1875. Omitting all reference to that portion of the paper in which the use of the forceps in ordinary cases is discussed, we would draw attention to those cases in which they were used before the os uteri was fully dilated. The forceps were applied in 59 cases, 44 of which were primiparæ, where the os uteri was two-fifths of its normal dilatation, the principal causes of interference being early rupture of the membranes (42 cases), pressure on anterior lip of uterus (8), prolapse of funis (2), and convulsions (2). In 18 the head was above the brim, in 17 in the brim, and in 24 in the cavity. Of the 59 children, 48 lived, 9 were born dead, and 2 died; and of the mothers, 53 recovered and 6 died. In the second division, where the os was three-fifths dilated, there occurred 71 cases, 53 being primiparæ, the operation being due in 43 instances to early rupture of the membranes, and in 13 cases to pressure on anterior lip; the forceps were applied in 6 above the brim, in 36 in the brim, and in the cavity 29 times respectively, with a result that 58 children lived, 7 being born dead, and 6 died; while of the mothers, 2 succumbed, one from gastro-enteritis and the other from uterine diphtheria. Where the os uteri was four-fifths dilated, 39 cases occurred, 26 being primiparæ, with a result of 9 deaths to the children, and one death, a primipara, due to convulsions. Dr. Johnston has long been an advocate for using the forceps in cases of a similar kind, and he states that the results generally are very satisfactory; but remarks that the forceps should not be used under similar circumstances, except by a practitioner who is thoroughly acquainted with the process of parturition, and has also obtained the necessary delicacy of touch and accuracy of manipulation.

"DISGUSTING ADVERTISEMENTS."

To the Editor of THE LANCET.

SIR,—A friend, who was disgusted by the filthy bills posted in urinals, telling our youth how they may gratify their brutal lusts with impunity, wrote to Col. Henderson on the subject, and got this reply:—

"SIR,—I have to acknowledge the receipt of your letter, calling attention to the encouragement given to immorality by disgusting bills being posted up in street urinals, and to acquaint you, in reply, that the police are fully alive to the necessity of checking this disgraceful system, and have prosecuted numerous offenders to conviction; but *the bill-stickers are the only persons against whom proceedings can be taken.*"

Now, Sir, as the authors of these filthy, vice-promoting contrivances and advertisements must be well known to the police, is it not unjust that they should be left unmolested, whilst the poor bill-sticker is punished? It is like punishing the weapon of the murderer instead of the criminal who wields it! Yours truly,

Trinity-square, S.E., Nov. 19th, 1878. DANIEL HOOPER, M.B.

REMUNERATION FOR POOR-LAW MEDICAL WORK.

MR. W. S. SIMPSON, medical officer of the workhouse, Pontefract, having resigned in consequence, we believe, of finding that his salary of £40, and no extras, only paid his expenses for drugs &c., and that the guardians would not increase it, advertisements were issued for a successor. We are glad to see by the local paper that no applications were made for the office. It was then proposed to advertise again at an advanced salary of £10. We hope the profession of the neighbourhood will not be tempted by £10 a year to forego their attitude of dignified independence. It is highly creditable to them that they should support Mr. Simpson in the stand he is making for fair remuneration for hard work. Unless Pontefract is very unlike the other towns of Yorkshire, its population must be growing, and the work of the workhouse officer increasing. Moreover, medical services are increasing in value; in other words, medical men are beginning to see that they have made themselves too cheap. It is refreshing to see guardians apparently confronted with the alternative of being without a medical officer, or giving something like a reasonable salary.

BACTERIA IN CARBUNCLE.

To the Editor of THE LANCET.

SIR,—Can any of your numerous readers kindly inform me whether it is common for bacteria to be found in the blood of those suffering from carbuncle? As instances of what I have myself observed I would quote the two following cases.

1. A small carbuncle situated at back of neck. Bacteria present in the blood taken from the *immediate* neighbourhood of disease, but not in blood from any other part of the body.

2. A large carbuncle situated in the lower part of right thigh. Bacteria in blood from all parts of the body, and equally distributed.

Your obedient servant,

WM. THOS. JACKMAN, M.R.C.S.,
Assistant Medical Officer, Greenwich Union
Nov. 18th, 1878. Infirmary.

Dr. Semple.—After the disclaimer which we inserted a week or two ago from the Chairman of the Committee on Croup and Diphtheria, we cannot accept Dr. Semple as the authorised spokesman of that Committee; and we would suggest that he should reserve the expression of his views on the subject for the forthcoming discussion at the Medico-Chirurgical Society. The views of an individual member of a Committee may differ widely from the conclusions of the Committee to which he happens to belong.

A STEP IN THE RIGHT DIRECTION.

IT is a matter of great satisfaction to announce that the Town Commissioners of Burton-upon-Trent have recently obtained an Improvement Act, which commenced to take effect on the 7th inst., and which contains a section compelling notice to be given of persons suffering from certain infectious and contagious diseases. There are five subsections, which make it in effect compulsory on the occupier or person having the management or control of the building in which the patient resides, or the medical practitioner, to give immediate notice as to the existence of these diseases, the onus of the matter resting, however, on the occupier only in the absence of any medical attendant; so that practically the medical attendant is the responsible individual, and is to be paid by the Town Commissioners a shilling for each certificate. There is, however, a serious defect, to which our attention has been drawn by a practitioner in the neighbourhood. The list of diseases to be reported includes small-pox, cholera, typhus, typhoid, scarlet fever, diphtheria, and relapsing fever; but, as is pointed out, measles is omitted—a malady that should undoubtedly be included in the schedule. We trust, however, that this is a remediable omission, and have to congratulate the Commissioners of Burton-upon-Trent on being, according to our knowledge, the first sanitary authority that has taken, as to this very important matter, a step in the right direction.

R. S.—The behaviour seems very bad; but the question is simply one of legal contract.

QUININE RASH.

To the Editor of THE LANCET.

SIR,—I have read with interest, in your report of the last meeting of the Clinical Society of London, Dr. Farquharson's remarks on quinine rash, and, as cases of it are of interest and rarity, I send you the following notes of a case which occurred in my practice early in 1876.

The patient, a sea captain, was ordered a mixture containing small doses of quinine, and on seeing him the following day he said, "Doctor, you have put quinine in my medicine, and I shall have the *rose*." I desired him to continue the medicine, and on the third or fourth day (I really forget which at present) large patches of erythema appeared on the arms and legs. Of course the quinine was immediately stopped, and appropriate treatment substituted for the erythema, which lasted several days. I was much struck with the case at the time, especially as the patient knew the effects of his taking quinine, and had at once recognised the drug even in small doses; so about ten days afterwards I requested him to submit to experiment, and take some more to oblige me, to which he kindly consented. After a few doses had been taken, he sent for me, as the rash was appearing, and, without doubt, it was reproduced to my entire conviction.

I am, Sir, your obedient servant,

WM. CAIRNS WICKS, M.B. Edin., &c.
Newcastle-on-Tyne, Nov. 16th, 1878.

To the Editor of THE LANCET.

SIR,—The recent discussion at the Clinical Society of London on the subject of quinine rash leads me to send you notes of a case that occurred in my practice some few weeks since.

MRS. B——, middle-aged, health generally good, came under treatment on August 27th, complaining of pains in the head, face, &c., diagnosed as neuralgic. I ordered two grains of quinine every four hours.

On Aug. 29th I was requested to call, as she was supposed to have scarlatina. On my visit I found her literally covered with a bright red erythematous rash, great irritation of skin, gastric disturbance, and increased pulse and temperature. The quinine was ordered to be discontinued, and a saline mixture substituted.

On Sept 6th, the rash having then quite disappeared, and the neuralgia continuing, she was again given two-grain doses of quinine, with on the following day precisely the same results—erythema, elevation of temperature, and gastric disturbance.

I may add that the diet on each occasion was particularly inquired into, with the view of discovering some cause for the eruption other than that of quinine. Yours faithfully,

H. PARKHOUSE, M.R.C.S., &c.
Carlton-road, N.W., November, 1878.

SANITATION IN MANCHESTER.

THE Manchester and Salford Sanitary Association have recently sent to the Corporation of Manchester a very important memorandum on a memorial to the Health Committee's published report, praying for the application to that city of the Artisans and Labourers' Dwellings Act. It appears that the Council do not consider the application of the Act necessary, because, in the opinion of its members, they already possess sufficient powers for the effective improvement of the town. The Sanitary Association above referred to do not, however, regret the adverse decision, because, among other chief reasons, it called forth a most able report from the medical officer of health. From this it appears that there is a specially unhealthy zone of dwelling-places, some 600 acres in extent, within which reside nearly one-third of the population. The death-rate in some of the sub-districts comprised in this area averages above 30 per 1000 of the population. Mr. Leigh suggests a variety of improvements, chiefly connected with the back-to-back houses, and the Association above referred to are so sanguine as to the ameliorating effect that these alterations would have upon the health of the general population that they look forward with great confidence to a speedy reduction of the death-rate to 13 per 1000. This may, of course, be utopian; but it is refreshing to see an Association, or indeed any public body, upholding cordially, and quoting extensively, the report of the medical officer of health, whose advice is generally too little appreciated.